REPORT

ON

THE MEDICAL TOPOGRAPHY AND STATISTICS

OF

THE SOUTHERN DIVISION OF THE MADRAS ARMY

COMPILED FROM THE RECORDS

OF THE

MADRAS

MEDICAL BOARD OFFICE.

PUBLISHED BY ORDER OF GOVERNMENT.

MADRAS:

PRINTED BY R. W. THORPE, AT THE VEPERY MISSION PRESS.

1843.

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SOUTHERN DIVISION.

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SOUTHERN DIVISION.

Introductory remarks; situation, extent, boundaries, &c.

This division of the Army is situated between the 8th and 13th degrees of North latitude, and 77° 30″ and 80th degrees of East longitude, being of an irregular shape, extending in its greatest length, from Cape Comorin to the borders of Mysore, and in its extreme breadth, from Negapatam on the eastern, to Cochin in Travancore, on the western coast, and presents a surface estimated at about 47,780 square miles, with a population amounting to 6,015,596. The general aspect of the country is extremely varied, being traversed by the great western range of mountains, which separate Travancore from the rest of the division; the northern parts are also mountainous. The river Cauvery flows through a great part of the division, irrigating in its course, the extensive plains reaching from Coimbatore to Negapatam.

The division is bounded on the east, west and south by the sea, and on the north by Mysore. It is subdivided into the following districts or collectorates, viz. Salem, Coimbatore, Travancore, Tinnevelly, Madura, Tanjore and Trichinopoly. The principal military stations are situated in Coimbatore, Travancore, Tinnevelly, Madura and Trichinopoly, the latter station being the Head Quarters of this division of the Army.

SALEM.

Situation and boundaries.

This Collectorate which is adjoining the southern division of Arcot, lies between 11° and 13° N. latitude, and 78° 20″ and 74° E. longitude, being bounded on the east by the Arcot collectorate, and on the west by the collectorate of Coimbatore, on the south by Trichinopoly, and on the north by Mysore. In length, from north

to south, it is about 120 miles, and in breadth it averages nearly sixty miles, presenting a surface estimated at 8,200 square miles, and having a population of 923,465 souls.

Extent and population.

From the different elevations of the various parts of the collectorate, the climate and appearance of the country vary considerably, for besides many detached hills, there are several ranges of mountainous high land in the district, which rise to the height of between five and six thousand feet above the level of the sea. The Juvenaddy mountains are situated on the eastern side of the Baramahl, the Sheevaroy, near the town of Salem, the Patchamally, in the talook of Ahtoor, and the Collemally, and Shendamungalum range, in the south eastern corner of the district. All these hills are inhabited and extensively cultivated, and produce abundance of teak, sandal wood, and * black wood. The climate is found to be cold and bracing, and for a great part of the year very salubrious.

Mountains.

Tanks & rivers. There are no natural lakes in the district, but there are many tanks, some of which are of considerable extent, and besides the Cauvery river, which runs along the western and southern boundaries, the Palaur flows through the northern part of the collectorate.

The Zillah is subdivided into 14 talooks; the names of which, and some useful information appertaining to each, will be found in the appendix.

Manufacture. Cloth is the staple manufacture, and was formerly exported in large quantities to America and the West Indies. Iron ore of a very rich and peculiarly fine quality abounds, and both iron and steel are manufactured to a considerable extent; a crystalized oxide occurs in great abundance, and is one of the richest ores of iron known; its specific gravity averages 5·136.

* *Dalbergia latifolia.* Roxb: frequently, though incorrectly, called *rose wood.*

Situation, elevation &c. The town of Salem, which is the chief station and capital of the collectorate, is situated in north latitude 11° 39′, and east longitude 78° 12′, at an elevation of 1,070 feet above the level of the sea. It lies in the lowest and narrowest part of a valley, about seven miles in width, formed by the Sheevaroy hills to the northward, and a smaller and undistinguished range, to the southward. This valley is prolonged about five miles from Salem in an easterly direction, when, by the termination of the smaller hills, the country again becomes open. Westward the country is generally open, the only exceptions being occasional small insulated hills.

Salem is about 100 miles in a direct line from the sea, and lies nearly due west of Cuddalore, to which there is a good road of communication. From Madras, in a south-westerly direction, it is distant about 220 miles. It has two Roads. direct lines of communication with the Presidency, one by Vellore, the other by way of Chingleput, and Tragar; a third might be named, that by way of Cuddalore, which however is nearly the same as that just mentioned by Vellore; these roads are generally in good repair.

In addition to these already mentioned a road to Bangalore falls into that from Madras, viâ Vellore, at Admoncottah, 40 miles from Salem. This road is in excellent repair throughout.

A road also runs from Salem in a south easterly direction, to Trichinopoly, and another south westwardly to the western coast, and the Neilgherries, which is in very good repair, for 40 miles, through the Salem district.

Rivers tanks &c. This district does not possess the advantage of any navigable river, one however known under the name of the Tyromany, having its main source in the Sheevaroy hills, flows by, and forms the boundary of the town of Salem on the north and west sides; on the western side the entrance

to the town is over a substantial bridge of three arches. It is only in the vicinity of Salem that this stream approaches to the magnitude of a river, its increase of size at this point being occasioned by the erection of three dams, one near the entrance to the town; a second at the distance of about nine furlongs, at the point where the river ceases to form the western boundary,—and where from the right angle it takes, it would seem its course had been in some degree diverted, for the defence of the old dismantled mud fort, two sides of which are washed by the river;—and the third at a distance of 9 or 10 furlongs lower down the stream. From its elevated source, and the circumstance, that the overflowings of one or more large tanks discharge themselves into the river, it becomes much increased, and occasionally rises above its banks during the rains, particularly in the vicinity of the dams; the town is well raised above the banks of the river, the bed of which is either stony or sandy, and the waters run off quickly leaving no alluvial deposit.

The face of the surrounding country is studded with tanks. It has been said, that during the rainy season, from the brow of the Sheevaroy hills, not less than 200 tanks, or ponds of various sizes, can be seen; there are within a circumference of five miles eighteen of these tanks, varying from a furlong or two, to a mile and half in diameter; besides these and the dams across the river, there are likewise three other dams by which the waters of some smaller streams are pent up for the purpose of irrigation; but they all become dry between the months of December, and March or April.

In a regular season the tanks are filled by the rains of the S. W. monsoon, between June and the end of August, and if much rain falls in September, the low grounds particularly between Salem and the Sheevaroy hills, become in many places swampy; this superabundant water however usually disappears during the dry month of October; of late years the N. E. monsoon, which begins about the end of

October, has not extended to this district sufficiently to reproduce these marshes.

Besides the Tyromany river which is never entirely dry, there are 2,400 wells, and thirty large bowries, in and around Salem. As might be expected from the inequality of the ground on which the town stands, water is found at very unequal depths, varying from six to thirty feet from the surface. With few exceptions, the water of these wells and reservoirs is more or less brackish, nevertheless it is very generally drank by the natives; the river water being chiefly used for ablution and culinary purposes. The natives do not consider its being brackish injurious to themselves, though they think it prejudicial to strangers. It so happens from the nature of the localities, that it is most convenient for strangers, whether Europeans or natives, to use the river water.

Sheevaroy hills. Mention has been made of the Sheevaroy hills as forming one boundary of the Salem valley, they approach to within five miles of the town, and extend in a northerly direction towards the flat land of the Baramahl; their greatest altitude is generally computed at 4,190 feet above Salem, and 5,260 above the level of the sea, but the general height of the table land does not exceed 4,600 feet;—a few small streams only are found on these hills, some of which become dried up, between the cessation of the N. E. monsoon, and the return of that from the opposite quarter; these hills are but scantily clothed with vegetation.

On their sides, for about the first third of the ascent, the common shrubs and trees of the plain are met with, the middle third is almost wholly clothed with bamboo, whilst on the upper third and summit, a short thick, coarse herbage, long rank grass with ferns, and a thick stubborn shrub peculiar to the hills are found; large wide spreading trees, among which the bastard cedar preponderates, border the streams.

Two passes lead up the hills, one on the southern side towards Salem, and one on the northern; the former about five miles in length, was once a good road, but is now hardly passable on horseback; the northern pass has never been more than a foot track.

Climate. With regard to climate, Salem has long been considered insalubrious, owing to the great daily vicissitudes of temperature during a considerable part of the year; the thermometer having been found to range in December from 60° to 87°—in January from 58° to 82°, in February from 60° to 91°, and in March from 66° to 95°; in the two succeeding months, the variation is less, being in April from 72 to 95, and in May from 75° to 96°; early in June the monsoon from the western coast, commonly extends to Salem, in short but heavy and frequent showers, attended with thunder and lightning, continuing till late in September; by the end of October rain begins to fall from the N. E. monsoon, and showers recur, with a very clouded sky, till the middle of December. Between June and December, the climate of Salem, though often sultry and oppressive, may be considered cool, the extremes of the thermometer being 68½° and 90°.

Prevailing winds. A north-easterly wind prevails pretty steadily at Salem from the beginning of November, to the end of January, or middle of February, which is for the two first months after it sets in, rather moist, cool and agreeable, but becomes more and more arid as the season advances, blowing from the mountains which bound Salem on the north; this wind becomes in January disagreeably cold and parching in the morning, and unpleasantly dry and warm at noon. It produces even in persons in health a disagreeable dryness of the skin, and exposure to it seems a frequent exciting cause of fever.

After the middle or end of February, the wind which is at

times variable, with frequent lulls, shifts round to the south and south-west, and blows from that quarter in hot puffs, and with much uncertainty, during April and May; cooled by the rains of the S. W. monsoon, this wind blows pretty fresh in June and July, and more moderately in the two following months. In October the wind again becomes variable, till the setting in of the N. E. monsoon.

Soil and mineral produce. The soil of the country immediately surrounding Salem varies much, a thin layer of calcarious and red loam generally prevailing, through which quartz rocks appear on the surface in many places; native carbonate of magnesia or magnesite is found in a stony barren plain, about five miles to the N. W. of Salem, in veins running generally in a vertical direction through horneblende rock, of which all the hills about Salem are formed; associated with this magnesian formation, chromate of iron is found, and also extensive thick veins of quartz. The chief value of this carbonate of magnesia, is from its forming a very excellent cement but it has also been used in the preparation of sulphate of magnesia, and of the pure magnesia. A small quantity was sent to Europe, some years ago as a commercial speculation, which however failed entirely. With these exceptions no other peculiar mineral products are found in the vicinity of Salem, though in the southern part of the district, iron ore exists in considerable quantity, yielding on fusion, about 60 per cent of metal.

Vegetable productions. The immediate vicinity of Salem, is, as might be expected from the number of tanks, highly cultivated; of the arable land the proportion of wet cultivation to dry, is estimated $1\frac{1}{2}$ to $3\frac{1}{2}$; cotton more than sufficient for the employment of the weavers of Salem, is grown in the neighbourhood; Oopum cotton, a perennial plant is indigenous to the country. The Bourbon cotton has also been introduced into the district, and is greatly on the increase, from the congeniality of the calcarious soil of Salem to its growth.

The American sea island, vine leaf and nankeen cotton have also been introduced, and with every promise of success. Indigo, and the common tobacco of the country are cultivated; the former being manufactured to some extent; and all the ordinary grains are produced. In average seasons even from dry cultivation, two and even three crops are reaped, and grain is therefore generally cheap.

Coffee. The cultivation of coffee has been introduced into this and other districts of southern India, within the last three or four years, and promises to become an article of export, being grown to a considerable extent on the Sheevaroy and other ranges of hills.

Population. The population of Salem and of the suburbs adjoining, is estimated at 19,021 souls, occupying 3,821 houses, giving an average of nearly 5 inmates to each; the town covers an area of 265 square acres. Two wide principal streets run from east to west, through the town, the other parts of which consist merely of narrow lanes. The direction of the two large streets is favorable to the perflation of air throughout the year, but the lanes are close and confined. The population of Salem consists of adult males, 5,801, or about 30½ per cent, adult females, 6,571, or 34½ per cent; male children, under 15 years, 3,636, or 19 1-9th per cent; female children 2,983, or 15 2-3d per cent; and considered with reference to occupation they may be classed into tradesmen, the great proportion of whom are weavers of silk and cotton, and agricultural labourers;* the weavers are considered more healthy than those whose occupations expose them to the sun and wind. The census taken in 1835 shews an increase of 87½ per cent, of the population since 1801, which increase is mainly attributable to immigration. The circumstances which lead to this conclusion, are the location here of the Company's commercial and other establishments, which must have attracted many weavers, and other settlers; the number of houses have only increased 13½ per cent, in the same period.

* These calculations are the result of a census taken with all possible pains, to attain accuracy, by the collector in 1835.

Salem is not remarkable for the longevity of its inhabitants, but births are thought to bear a high ratio to the population. No documents or data however exist, on which can be founded even a rude guess, at the annual number or proportion of deaths, births and marriages. The town may be considered on the whole clean, favoring which two circumstances concur, viz. a great demand for manure of every description, and the general declivity towards the river.

The dwellings of the poorest class are the common thatched mud huts of the country, but little raised from the ground; the houses of the middle and better classes, are frequently of brick, a mode of building which has of late been on the increase, and even when the walls are of mud, the roofs are now generally tiled, and the floors somewhat raised from the ground. Cotton cloths being manufactured at this place, a very small proportion of the inhabitants are without clothing; they also sleep on cotton carpets, or on mats spread on the ground.

The diet of the chief mass of the population is the inferior descriptions of grain, such as raggee, cholum, &c., and it is estimated that from $\frac{1}{4}$, to $\frac{1}{3}$ of the people eat meat daily; other classes as ryots, seldom obtain animal food, except on holidays. It is not supposed that the protracted use of any particular grain is injurious, but on the contrary changes of diet are deprecated by the natives, as prejudicial to health.

Prevailing diseases; Intermittent Fever.

Intermittent fever is endemic, and is present more or less throughout the year; it is usually most prevalent in the first quarter, a period during which, as already noted, easterly winds prevail, the mornings being cold and raw, and the days dry and scorching, attended with great vicissitudes of temperature. It is to be observed also, that this season corresponds with the time when the numerous tanks, and extensive rice grounds in the vicinity, have become, or are nearly dried up; a condition of the soil

generally admitted as most favorable to the developement of of malaria; this remark, and the circumstance of the town being situated " in a valley," will explain not only the prevalence, but the endemic nature of febrile diseases. Few if any natives, strangers to the place, escape an attack of fever during the first twelve months; and very frequently they are attacked within a few weeks after their arrival. The ague assumes in natives every variety of type, though more rarely the quartan; the great majority of cases are of the quotidian form.

Europeans are much less subject to intermittent fever than natives, and when not predisposed to the disease by irregularity of the biliary functions, or other causes, have been known to escape fever for several years; but when once the disease is contracted, it very rarely perhaps never fails to recur from time to time, at least during the more feverish season; and occasional paroxysms in some instances occur long after removal from the country. As to the type the intermittent assumes in Europeans, experience shows that the quotidian and tertian forms are about equally prevalent.

Attacks of the Salem intermittent, whether in Europeans or natives, are at first generally of a mild character, a slight determination to the head, in the first attack, is usually the only local affection, and it has been observed that the disease yields very readily to quinine;—the natives when the subjects of intermittent fever, and left to their own resources, are commonly content to abide the spontaneous cessation of the paroxysms; all classes however are glad to obtain bark, and more especially quinine when suffering from this disease. Enlargements of the spleen and liver, consequent upon which dropsy general or local supervenes, are not unfrequently the sequel of this fever.

Dysentery and Diarrhœa.

Dysentery and diarrhœa are not unusual among the natives, particularly during the rains; and

disease of the lungs is also frequently met with, during the same season.

Cholera. Cholera for several years prior to 1834, occurred in an epidemic form generally twiee in the year, at the commencement of the rains in May or June, and at their final cessation after the N. E. monsoon, but as in intermittent fever, isolated cases are met with throughout the year. It used to be observed that every heavy fall of rain, particularly if unseasonable, was followed by the appearance of this disease. Since 1833, cholera as an epidemic has oecasionally occurred, but not so severely or extensively as in former years.

Fort. On the western bank of the river, and rather to the south of the town, stands the old mud fort of Salem, the ramparts of which have been partially thrown down, and the ditch filled up. The houses of the few Europeans resident here are at some distance west of the fort, which is chiefly inhabited by peons.

Jails. Jail No. 1, or the old jail, is situated on the right bank of the river, detached from all other buildings except the hospitals. The site is slightly elevated and sloping; soil thin, red and dry, resting on a rocky base; it is a bomb proof building with an arched roof, having walls of great strength and thickness, composed of burnt brick and ehunam, with a partition wall dividing it into two parts lengthwise. It has, besides three small cells, seven apartments of equal size, ventilated by 19 grated windows of moderate dimensions, and is calculated to contain 146 prisoners, allowing 2 feet, by 6 or 7 for each person; but were the number of the prisoners complete, so limited a space would evidently be incompatible with health. The particular dimensions of the wards is exhibited in the annexed sketch. Within the walls are two wells of good water. This jail was first oecupied in 1805, and has undergone no material alteration, or repairs

since that period, and has always been allotted for prisoners sentenced to death, or to more than two years confinement.

Jail No. 2, or the new jail, is situated on the left bank of the river in close approximation with the town; its site is low, damp, and confined; the soil is black earth resting on an argillaceo-calcarious base. It is built in the form of an oblong square with a tiled pent roof; the walls are thin, composed of sun burnt brick and mud, pointed with chunam. It contains 13 apartments, and 2 store rooms of different dimensions, which are ventilated by 53 good sized grated windows, and the building is calculated for the accommodation of 318 prisoners, allowing, as in the old jail, a space of 2 feet, by 6 or 7, for each prisoner, which is of course liable to objection as above stated. The annexed sketch shews the distribution of the cells, and other particulars. It formerly consisted of a number of small godowns converted to the present use in December 1821, and was first occupied in January 1822; the windows were enlarged and increased in number, and the floors raised a few inches by bricks being laid down edgewise in 1823, but it still continues damp. It is allotted for prisoners under trial, and for such as are sentenced to 2 years confinement, and under. There is a well of brackish water in the centre of the yard.

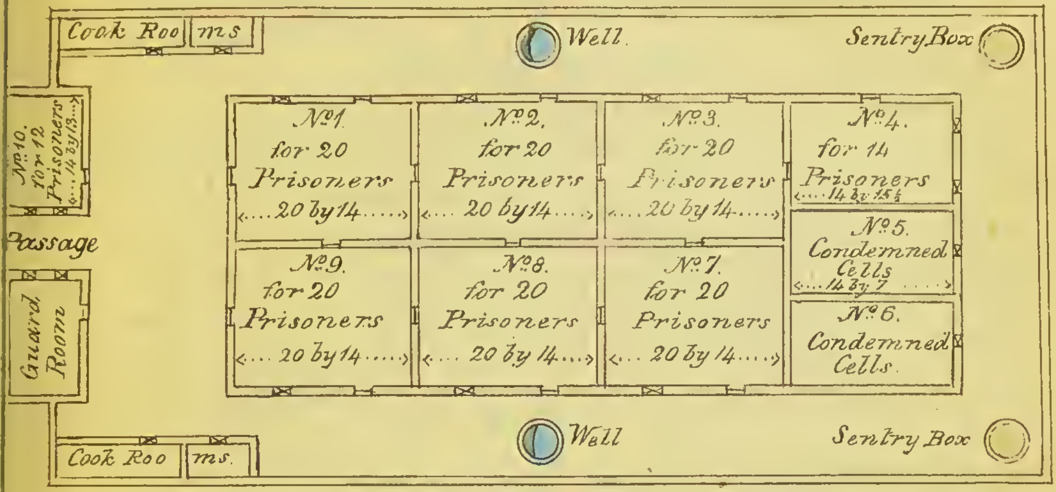
Adjoining the old jail is the hospital, a room 35 feet by 14, having the requisite out houses, but it is much too small for such a sickly jail. The military hospital also adjoining, is but a mere shed; from the little sickness in the detachment doing duty here, it however answers the purpose sufficiently well.

The civil jail within the fort, has generally very few tenants; it is a quadrangular building after the common fashion of the better description of native houses.

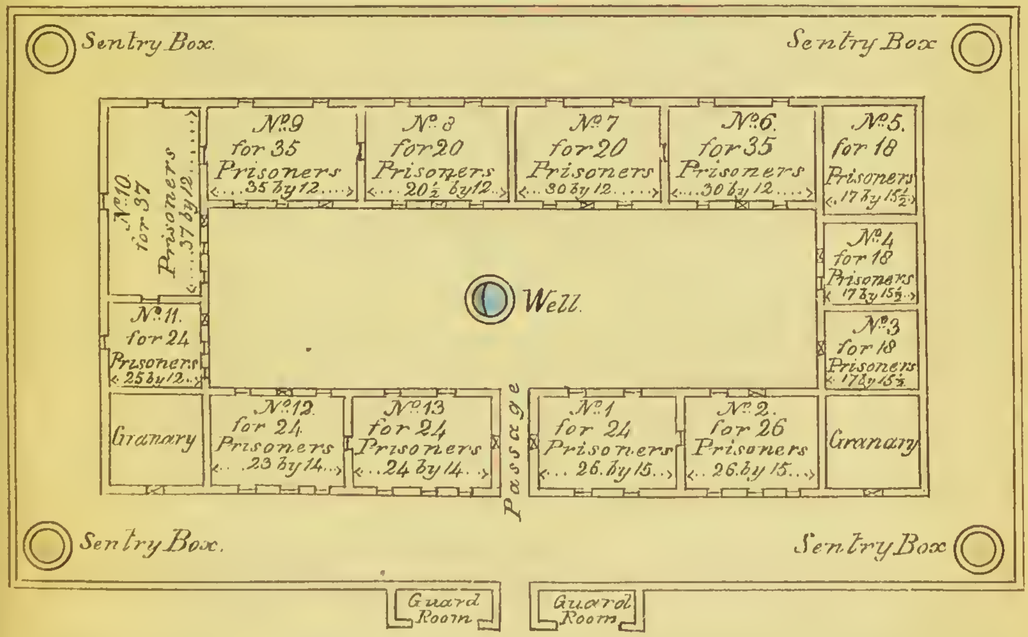
The following tables shew the nature and amount of disease and mortality which have occurred amongst the inmates of the jails, during a period of ten years, from 1829 to 1838

PLAN of the JAILS at SALEM.

No. 1.



No. 2.



Lithographed by B. C. Regel. Madras Lithographic Press.

inclusive; they exhibit the diseases classified, and point out the per centage of sick to strength, and of deaths to the number of sick treated.

JAIL OF SALEM.

No. 1.—*Table exhibiting the Number of Admissions and Deaths, of the Convicted Prisoners, from each Class of disease, for ten years.*

CLASSES.	DISEASES.	From 1829 to 1838. Aggregate strength 2,393. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions & deaths from each class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each Class.	Total Deaths from each Class.	Average percentage of sick to strength.	Average percentage of deaths to sick.
Fevers......	Febris ephemera	17	0	33	2	253	34	216	25	469	59	19 ·598	12 ·579
	,, intermit quot.	220	28	173	22								
	,, tertian.......	9	1	9	0								
	,, remitt.......	6	4	0	0								
	,, continua.....	1	1	1	1								
	Cholera	215	99	110	61	215	99	110	61	325	160	13 ·581	49 ·230
Diseases of the Abdominal viscera......	Diarrhœa.... ..	148	22	154	28	236	46	314	95	550	141	22 ·983	25 ·636
	Dysenteria acuta et chronica.	88	24	160	67								
	Hepatitis acuta et chronica. ..	0	0	1	1	0	0	1	1	1	1	0 ·041	100 ·0
Diseases of the Lungs.	Catarrhus	5	0	4	1	14	6	11	3	25	9	1 ·041	36 ·0
	Asthma.........	4	3	1	1								
	Phthisis pulmonalis.........	1	1	1	1								
	Pneumonia......	2	0	3	0								
	Dyspnœa.......	2	2	2	0								
Diseases of the Brain.	Apoplexia......	5	5	4	4	14	5	11	7	25	12	1 ·011	45 ·0
	Epilepsia.......	4	0	3	0								
	Paralysis.......	1	0	3	3								
	Mania..........	4	0	1	0								
Eruptive Fevers......	Variola	14	4	2	0	33	4	26	0	59	4	2 ·465	6 ·779
	Varicella.......	19	0	24	0								
Dropsies....	Anasarca.......	86	33	88	36	87	34	89	36	176	70	7 ·351	39 ·772
	Ascites....... .	1	1	1	0								
Rheumatic affections.	Rheumat. acutus et chronicus	74	4	63	0	74	0	63	0	137	4	5 ·725	2 ·919
Venereal affections..	Syphilis primitiva..........	1	1	1	0	2	1	5	0	7	1	0 ·292	14 ·285
	Gonorrhœa.....	1	0	1	0								
	Hernia humoralis............	0	0	2	0								
	Strictura urethrac.........	0	0	1	0								
Specific diseases.....	Atrophia.......	1	0	0	0	103	0	52	3	155	3	6 ·477	1 ·935
	Dracunculus....	101	0	50	1								
	Ulcus phagedenicum........	0	0	2	2								
	Scorbutus......	1	0	0	0								
Diseases of the Eye,.	Morbi Oculorum...........	21	0	22	1	21	0	22	1	43	1	1 ·796	2 ·325
Diseases of the skin.	Morbi cutis.....	64	0	74	0	64	0	74	0	138	0	5 ·766	0 ·0
	Other diseases..	857	4	806	14	857	4	806	14	1663	18	69 ·491	1 ·082
	Total.....	1973	237	1800	246	1973	237	1800	216	3773	483	157 ·668	12 ·801

JAIL OF SALEM.

No. 2.—*Table exhibiting the number of Admissions and Deaths, of the Prisoners under Trial, from each Class of disease, for* 10 *years.*

CLASSES.	DISEASES.	From 1829 to 1838. Aggregate strength 161. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions and Deaths from each Class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total Deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers......	Febris ephemera	2	0	0	0								
	,, intermitt quotid	4	1	1	1	6	1	1	1	7	2	4 ·317	28 ·571
	Cholera..........	22	15	4	3	22	15	4	3	26	18	16 ·149	69 ·230
Diseases of the Abdominal viscera... ...	Diarrhœa.......	2	0	3	0								
	Dysenteria acuta et chronica	3	1	1	0	5	1	4	0	9	1	5 ·590	11 ·111
Do. brain..	Mania...........	2	0	1	0	2	0	1	0	3	0	1 ·863	0 ·0
Eruptive fever........	Varicella	1	0	0	0	1	0	0	0	1	0	0 ·621	0 ·0
Dropsy.....	Anasarca.......	2	0	0	0	2	0	0	0	2	0	1 ·242	0 ·0
Specific diseases....	Dracunculus	1	0	0	0								
	Ulcus phageden	1	0	1	1	2	0	1	1	3	1	1 ·863	33 ·333
Do. skin..	Morbi Cutis....	0	0	1	0	0	0	1	0	1	0	0 ·621	0 ·0
	Other diseases..	2	0	2	0	2	0	2	0	4	0	2 ·481	0 ·0
	Total.	42	17	14	5	42	17	14	5	56	22	34 ·782	39 ·285

Remarks on the preceding tables of disease.

The average annual numerical strength has been 239, and the admissions into hospital 377, or 157 per cent, on the strength. In 1833 and 1834, years of famine, this average was considerably increased; the strength in 1833 amounted to 498, and in 1834 the number of prisoners was 412; in these two years also, 1372 admissions took place, more than a 3d part of all the sick during the ten years, with 228 deaths, nearly one half of all the mortality; the total admissions being 3773, and the total deaths 483.

The principal diseases both as to number, and the mortality caused by them, have been *fevers* of various types,

(but chiefly *quotidian intermittent*), *cholera, diarrhœa, dysentery* and *anasarca*. A concise table, shewing the admissions and deaths from these diseases, each year, is appended.

Table No. 3.

	1829		1830		1831		1832		1833		1834		1835		1836		1837		1838		Total	
	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Fevers..............	29	4	16	0	15	2	26	3	83	17	60	12	37	3	86	3	65	5	52	10	463	59
Cholera..............	119	50	39	22	3	2	29	13	81	43	0	1	0	0	0	0	43	21	11	5	325	160
Diarrhœa............	15	0	40	4	31	3	37	1	47	13	25	15	20	4	32	5	29	3	26	2	302	50
Dysentery...........	9	6	6	3	4	1	4	1	71	31	55	35	15	5	5	0	47	5	32	4	248	91
Anasarca........	20	13	24	14	6	3	3	0	41	16	41	17	8	0	6	2	15	1	12	4	176	70
																				Total..	1520	430

Thus it will be seen from the five diseases alone, that 430 deaths have occurred, or nearly 8-9ths of the whole mortality.

It is not easy to explain satisfactorily, the much more extensive prevalence of these diseases, and the usually greater amount of mortality, amongst the inmates of this jail, above that which will be seen to occur in the other prisons in the division. It is well known however, that the inhabitants of the Salem district suffer periodically from febrile disease, which has been supposed by the Superintending surgeon to cause visceral derangements and dropsies, and thus to render them more susceptible of being attacked by epidemic visitations. It has also been observed that natives unaccustomed to change of climate are particularly liable to sickness when removed from their villages, and taking into consideration the great extent of the Salem district and of the Baramahl, and the varieties of climate they embrace, compared with the other collectorates in the division, it is highly probable that change of climate, abode, food, &c., exert a great influence on the health of the prisoners; and in striking contrast with the mortality in the Salem jail, is that of the detachment of native soldiers stationed here, usually about 260 in number, amongst whom the average annual mortality has not been above 2½ per cent on the strength, while that in the jail, during the same period, from 1829 to 1838, averaged 20·183 per cent.

The site of the jails may also exert some injurious influence on the inmates, particularly that of No. 2; which is low, and the floors damp, notwithstanding their having been raised a second time in 1830; this may occasion bowel complaints, and induce a state of system favorable to dropsical effusion; but doubtless the principal cause of the great sickness and mortality, is the peculiar nature of the climate, and liability to epidemic visitations, above noticed.

During the three years from 1826 to 1828, both inclusive, the total annual mortality was $17\frac{1}{2}$ per cent, the proportion from particular diseases being as follows, viz., from cholera $7\frac{3}{4}$, from bowel complaints $2\frac{2}{5}$, from dropsy 4, from fever $1\frac{1}{5}$, from other diseases, (of which those of the pulmonary viscera were about one half,) 2 per cent. The average of deaths to cases treated, during the same period, was as follows, cholera $46\frac{1}{2}$ per cent, bowel complaints $21\frac{1}{4}$, dropsy $65\frac{2}{5}$ and fever $7\frac{2}{3}$.

Fever. With regard to *fever*, in addition to the previous remarks, it is only necessary further to add, that in the intermittent form of the disease, the first attack was seldom or never fatal, and that most of those deaths recorded in the table, were the result of frequent and protracted relapses, complicated with visceral disease.

Cholera. The mortality from *cholera* has been nearly 50 per cent, on the cases treated from 1829 to 1838; in every visitation of this disease amongst the prisoners, it has shown itself in the low asphyxial form, and it has been observed to be usually more fatal amongst them, than amongst the inhabitants generally.

Dysentery and Diarrhœa. *Dysentery* and *diarrhœa* of a peculiarly severe and intractable form, are always present in this jail, and have produced a great proportion of the mortality; in some years, as 1833, 34 and 37, both diseases from their frequency may be said to have been epidemic. The character of the dys-

entery especially in such seasons, may be called "passive"; no pain of abdomen being present, and it being unattended with febrile symptoms; the watery, grumous bloody stools were passed with little griping and no tenesmus, and changed to a pale watery and equally offensive fluid, after three or four days, in many cases resisting all attempts to check it; in this state as well also as in cases of diarrhœa, the sulphate of copper combined with opium, was the only remedy which produced any good effect.

The post mortem appearances in these diseases are not recorded.

Dropsy and Beriberi.

In connection with *dropsical disease* it may be mentioned, that previous to 1829, *Beriberi* prevailed in some seasons in the jail, the numbers affected were small, but the mortality was very great in proportion. The dropsical rather than the paralytic symptoms predominated. Since that time only one case, and that scarcely marked by paralysis, has happened amongst the prisoners, although the disease attacked the sepoys stationed here, in 1832 and also in 1833, as will be seen by the following extracts from the medical officer's report.

"The first quarter of the year 1832 was marked by the sudden out-break of a severe form of *Beriberi* with paralysis amongst the sepoys. It was very fatal, of seven men so attacked, six died, two of these within a few hours after admission."

"During the same quarter of the ensuing year, a similar disease prevailed; but on this occasion the œdema of beriberi was present as well as the paralysis; eight cases occurred, one recovered, three died in hospital, and the other four were transferred immediately after admission to Dindigul, to the Head Quarters of the regiment, and all recovered."

"Nothing satisfactory could be elicited as to the cause of

" this outbreak of beriberi. The dry disagreeable north east wind peculiar to the season of the year was remarked to be unusually high, particularly at night, but in no case could any direct connection be traced between the attack and exposure to this wind; that it had some influence in producing this disease however seems probable, from the fact, that among the large body of prisoners who were safely excluded from the night wind, but one case of the disease appeared."

During the last four years of the period embraced by these remarks, it will be observed (see table No. 3,) that dropsy was not only less frequent, but also less fatal than formerly; and, as will be seen from the following extract from a report dated 1837, the character of the disease appears to have changed considerably.

" Formerly the dropsy so common in the Salem jail, was purely a cachectic disease, and treated accordingly; on the contrary it now exhibits rather an inflammatory character, and in the treatment venesection is sometimes requisite, and jalap and supertartrate of potash are extensively used, particularly the latter, and with much advantage."

Dyspepsia ? In the latter half of the year 1838, a few cases of an anomalous complaint were admitted into the hospital, characterised by the following symptoms; great debility burning sensation in the hands, feet, and in the eye balls, tongue slightly coated, pulse not much affected, bowels not deranged, nor appetite impaired; after a few days a speck of ulceration appeared on the cornea of one or both eyes, with surrounding opacity, diarrhœa supervened and continued for some days, when œdema appeared, and was followed by a fatal termination. The treatment, which proved successful, in slighter cases when the burning sensation was confined to the hands and feet, was first an emetic on admission, with small and repeated doses of the neutral salts and a combination of Dover's powder with nitre, but was of no avail in severe cases. The death under the head *morbi oculorum*, recorded in the table, was a case of this complaint, including

which four deaths were occasioned by it. In these cases change of food was considered the probable cause of the disease.

Ulcers.

Amongst the class of other diseases, *ulcers* produced by the friction of the irons on the legs and ankles, form, in this as in all other jails, the greater proportion. They have been treated by the application of the solid lunar caustic, with very satisfactory results; cicatrization being found to be speedy, and the surface less liable to fresh abrasion on resuming the irons, than when healed by other applications.

In conclusion, it may be proper to add a few lines on the Salem hills, considered as a sanatarium.

Sheevaroy Hills as a sanatarium.

The Salem or Sheevaroy hills, previous to 1824, were much frequented by invalids, and others to escape the heat of the plains; but in June of that year, a severe and fatal disease broke out on them, assuming in many cases the yellow or remittent form of fever, which caused them to be deserted. As a general rule it may be observed, these hills are free from fever, during the dry months, and it is not till after a fall of rain, that disease prevails to any extent; but from the superior advantages the Neilgherry hills offer to invalids, the value of the Sheevaroy hills as a sanatarium, is not of much importance. The elevation of these hills is not above fever range, although it has been pretty correctly ascertained, that they are healthy during the dry months; they however afford an eligible temporary change of climate, for people residing in the immediate neighbourhood. The same remarks apply to the Shendamungalum, and other ranges of mountainous land, in this collectorate.

COIMBATORE.

Situation boundaries and extent.

The District or collectorate of Coimbatore, situated betwen the parallels of latitude 10° 45,″ and 11° 48″ north, and longitude 76° 50,″ and 78° 10″ east, is divided into fourteen talooks, viz. Coimbatore, Danaikencottah, Suttimungalum, Colligal, Andioor, Errode, Parindaroy, Cheyoor, Pulladum, Pullachay, Chuckragherry, Dharapoorum, Kongyam and Caroor; it is bounded on the north, by the territory of Mysore, and the river Cauvery, on the south by the province of Dindigul, and the hills of Travancore, on the east, by the collectorates of Salem and Trichinopoly, and on the west, by the eastern ghauts, the Neilgherry mountains and the Vellingherry and Paulghaut ranges of hills. Its extent from north to south is about one hundred and ten miles, and from east to west about seventy. Its superficial extent may be estimated at about 8,280 geographical square miles, and the average height of the plain above the level of the sea, is about 900 feet. The distance of its western boundary from the Malabar coast, is about seventy miles, and of its eastern, from the coast of Coromandel, about one hundred and thirty.

Although some parts of the district, and particularly those lying to the southward and westward, which are known by the name of the Animally woods, and celebrated as being the haunts of wild elephants, are covered with forest and thick jungle, yet, generally speaking it may be described as a flat open country, ascending gradually from the south and east, to the base of the Neilgherry and Paulghaut ranges of hills, which rise abruptly from the plain, with an elevation, particularly the former, of several thousand feet.

This province, Buchanan states, was in remote times known by the name of Kanjiam, and had been under the

dominion of the Mysore Rajahs for about 120 years before it was acquired by the East India Company, in 1799.

Rivers. The principal rivers watering this district, are the Cauvery, the Bowany, the Noyel and the Amberavatty. The Cauvery has its source near Mercara in Coorg, and after passing the eastern ghauts, runs along the whole eastern frontier of the district, and affords for nearly the whole year, an abundant supply of water for the purposes of cultivation, in the neighbourhood of its banks. The alluvium which this river deposits is of a peculiar character, and has been described in the account of British India, by Professor Jameson and Dr. Ainslie, as follows. " This river (the Cauvery) " flowing in a long course through the Mysore country, over " an extensive and generally barren surface of granitic rocks, " with scarcely any woods or jungle on its banks, seems to " bring down little or no vegetable matter, but a rich clay, " produced from the felspar, which predominates in the " granites of the south, intermixed with decomposed calcarious " conglomerate, rendering the plains of Tanjore the most " fertile of the south of India."

The Bowany rises among the Koondah mountains, runs along the eastern base of the Neilgherries, and is joined near Poongaur, a village in the Danaikencottah talook, by the Moyar; and these two streams retaining the name of Bowany, continue their course for about thirty miles through the talooks of Danaikencottah, and Suttimungalum, and at last join the Cauvery at the town of Bowany, in the talook of Andioor.

The Noyel rises in the Vellingherry hills to the westward of the town of Coimbatore, passes nearly through the centre of the district, and joins the Cauvery near the village of Nercooppum, in the talook of Kongyam. The Amberavatty has its source in the Animally or Delly mountains, and after passing through the southern part of the district, it also, at

the village of Trimacoodul, in the talook of Caroor, discharges its waters into the Cauvery.

Besides these, there are numerous other jungle streams, and hill water courses, having their sources generally amongst the western mountains, running in an eastern direction, and all joining either the Cauvery or its tributaries.

Lakes tanks and wells.

The lakes or tanks are 504 in number, some of them of considerable size, situated chiefly in the neighbourhood of the villages. Wells are also very numerous, the number registered, from which revenue is derived, being 38,429, their average depth is 25 feet, the water from them is generally speaking, exceedingly brackish, but is much used for the purpose of irrigation; and on lands thus irrigated the best tabacco produced in this district is raised, the saline properties of the water being considered favourable for the cultivation of the plant.

Morasses.

There are several extensive morasses in the district, situated near the base of the high hills to the southward and westward, and many of the villages in their neighbourhood, particularly those in the Chuckragherry talook, are proverbially unhealthy.

Canals or water courses.

Canals or water courses, are numerous, proceeding from the different rivers as follows, from the river Cauvery 5, two in the talook of Colligal, and three in that of Caroor. From the river Noyel 25, seven in the talook of Coimbatore, eleven in Pulladum, four in Cheyoor, two in Kongyam, and one in Perindoray. From the river Bowany 4, two in the talook of Suttimungalum, one in Errode, and one in Danaikencottah. From the river Amberavatty 22, seven in the talook of Chuckragherry, five in Dharapooram, one in Kongyam and nine in Caroor. These channels are used solely for the purposes of irrigation, and their great importance to cultivation, will be evident from the fact, that the annual amount of the

revenues of villages, which were formerly watered by the periodical rains, and are now irrigated by canals, has increased from Rupees 9,641, to 51,169.

Mountains and Hills. The principal mountains are a part of the Neilgherry range near Kotagherry, rising to the height of 5,600 feet from the plain, running from west to east, and forming the southern side of the triangular plateau of the Neilgherries. Next to these is the Animally range, in the southern part of the district; Captain Ward found some of their peaks as high as that of Dodapetta, on the Neilgherries, which rises to 8,790 feet; several smaller ranges known generally as the Vellingherry and Paulghaut hills, which form the western boundary of the district, connect these two ranges together, with the exception of the opening through them, called the Paulghaut pass, and their average height may be estimated at from 1500, to 2000 feet. In the northern part of the province is a range of primitive trap hills, called the Cauvery chain, forming the southern part of the eastern ghauts, extending eastward from the Neilgherries, their height being in many places 4000 feet. These mountains exhibit throughout, the bold and rugged outline of the primitive formation, and, so far as they have been examined have been found to consist of small grained sienitic granite, and primitive green stone, or horn-blende rock. The general direction of the higher ranges, viz. the southern side of the triangle of the Neilgherries, and the Animally or Delly range, is nearly from west to east, whilst that of the smaller ranges is from north to south, or the same as that of the ghauts. They all however give off spurs and branches, which run in every direction, occasionally forming confused clustered masses, which have in many parts from the plains, an exceedingly picturesque appearance; the sides of the hills are covered with jungle, which also forms a belt round their bases, in many places from 5 to 10 miles broad. They are intersected by many valleys, and are completely separated at Paulghaut by a pass 20 miles in breadth. The very considerable influence which this opening exerts, over the winds and climate of the district, will be hereafter described

under the head of Climate.* The difference of temperature between the plain and the higher surrounding elevations, taking the annual mean of each, may be stated to be about twenty-two degrees.

Climate.

The climate of Coimbatore having been so fully described by Dr. Ainslie, Mr. Smith, and Dr. Christie in their medical report on the *Epidemic fever* which prevailed in this, and the adjoining districts, in the years 1809, 1810 and 1811, extracts from their report are here given. "Coimbatore as might naturally be expected from its elevation is colder and drier than some of the neighbouring countries: we have already remarked that the general plain of it is about 900 feet above the level of the sea; so that if the theory of Dr. Black be just, that for every two hundred feet of elevation we may reckon one degree of reduced temperature, the district in question ought to have a great advantage in this respect, over all those that lie lower and nearer the ocean."

"The N. E. monsoon commonly commences soon after the calms are over, which takes place about the period when the sun crosses the equator, and enters on his southern declination (in other words, about the middle of October,) and first pours its torrents over the Coromandel coast, in the vicinity of Madras, about the beginning of November."

"In Coimbatore the rains at this season, swell the rivers Noyel, Bowany and Amberavatty, as also the Cauvery; and at this period, too, the tanks and low grounds of the district receive their great annual supply of water."

"The end of December when the N. E. monsoon rains are over, and the sun has gained his most southern declination, may be considered as the coldest season of the year, in all those countries situated north of the equator. In Coimbatore, at this period, the range of the thermometer, in the shade, is from 62° to 80°, or 82°, the climate is then de-

* See also report on the Paulghautcherry District.

" lightful; and the N. E. wind proves enlivening and bracing
" to weakly constitutions. Towards the end of January, and
" in February, the dews fall heavily, and the fogs in the
" morning, especially in situations near the mountains con-
" tinue sometimes till 9 o'clock in the forenoon, occasioning
" simple intermittent fevers, and catarrhs amongst the na-
" tive inhabitants."

"The N. E. wind prevails with little variation till the end
" of March; though it generally becomes weaker the further
" the season advances. After this period as the sun ap-
" proaches the vernal equinox, the winds are somewhat vari-
" able; and occasional calms ensue till he has gained about
" the seventh degree of northern declination, when what is
" called the S. W. monsoon may be said to commence."

" From the time the sun passes the seventh degree, in his
" northern declination, the southerly and S. E. winds begin
" to prevail on the Coromandel coast, and continue till about
" the middle of May: in Coimbatore, and in other inland
" tracts they are weaker and less unpleasant than at places
" closer to the sea, where, particularly near the period of
" their cessation, they are often warm, and to some constitu-
" tions extremely enervating. In the month of March, at
" Coimbatore, rain is very uncommon; the wind, though in
" the morning it still blows gently from the N. E., comes
" usually round to the S. E. in the evening; and towards the
" end of the month the N. E. wind, for the most part dies
" away altogether, and with it, in regular seasons, those
" dews in a great measure disappear, which had fallen hea-
" vily during the two preceding months."

" The sky in Coimbatore in the month of April, is fre-
" quently overcast, but rain is not very common; at least
" not to a greater extent than a few showers from the S. and
" S. W. The weather gets daily hotter, the average range
" of the thermometer for the month being 76°, to 93°. The
" wind continues to blow from the same direction as in the

" end of March but oppressive lulls are often experienced. " In May, the thermometer rises somtimes as high as 96°, " and 98° in the shade, and seldom falls lower than 79°, the " sky is often over cast, and there are frequent disagreeable " whirlwinds, which are quickly followed by pelting show- " ers, accompanied by thunder and lightning."

" The southerly, or what is called the " *Along shore wind,*" " generally terminates about the middle of May; when owing " to this part of the peninsula having been so powerfully " heated by the vertical rays of the sun (the sun is vertical " over Coimbatore about the 18th April,) a change takes " place in the direction of the wind; which becomes general " nearly all over India, and which brings on, before the " rains begin to fall in June, by far the hottest season of the " year."

" We have observed that the sun crosses the equator about " the 21st of March, at which period he commences his " northern declination, and that soon after, the wind begins " to blow from the south; so that by the end of May he has " been vertical over all those districts lying betwixt the " southern extremity of the peninsula and Coimbatore, and " which have of course been much heated: the consequence " of this is, that the air which takes its direction from the " now comparatively cooler regions on the eastern, and " southern coasts of Africa, rushes towards the tracts where " the greatest rarefaction has taken place, and which, as we " have seen must, at this time, be the arid plains of the Car- " natic." " But this wind passing over a great extent of " heated country, will naturally partake of its temperature; " and in this way is produced the hot west wind, which con- " tinues to blow pretty regularly towards the end of August, " when frequent calms and light breezes from different quar- " ters ensue, the evident consequences of the sun's again " approaching the equator."

" Soon after the setting in of the hot westerly wind on the

"coast of Coromandel, the rainy influence of the S. W. mon-
"soon is first experienced on the other side of the peninsula,
"pouring its flood over Malabar and the Mysore country,
"and amongst the immense Balaghaut and western moun-
"tains, but it is but partially felt in the provinces lying east
"of these high lands. In situations near the hills, indeed,
"there are at this time frequent heavy showers."

"After the torrents which distinguish this monsoon, have
"begun to fall in Malabar, the heat of the west wind on the
"Coromandel coast is usually a little moderated, but in the
"Carnatic by no means to that degree that we might expect,
"there its temperature may be nearly calculated by the dis-
"tance from the great western ghauts; as, the farther east
"we go, the greater becomes the heat of the air, the natural
"consequence of the wind having blown over a greater tract
"of arid land."

"After what we have said it can easily be supposed that
"the west wind in Coimbatore, in May, June, July and
"August, is by no means so distressingly hot as in situations
"lying farther east, but it is at least in some parts, fully as
"unpleasant from another cause—its immoderate strength.
"In speaking of the general appearance of this district, we
"mentioned the Paulgautcherry pass into the Travancore
"country, which is in a direct line with Dharapooram and
"Trichinopoly: this opening is of considerable width, and
"being shaped like a funnel, with its narrowest end towards
"the east allows a free and full passage to the west wind,
"from the time that it begins to prevail: for the first fort-
"night this is comparatively weak and little warm, but from
"the commencement of June, till near the end of August,
"when the rains are falling on the Malabar coast, it becomes
"cooler, particularly near the hills, and sweeps over the
"tracts we have above mentioned, with great violence; so
"much so indeed at Dharapooram, as to prove extremely un-
"pleasant to Europeans, who are, during the time that it

" lasts in a great measure prevented from taking exercise
" in the open air.

" In the other parts of this district, out of the strong current of wind, the climate at this time is much more pleasant; such as at Coimbatore and Bavanie; the first of which stands clear of the pass, the other a great way to the westward, and northward of it."

"Were the great western mountains as near to the ocean, in this province, as they are in Tinnevelly we have no doubt but that the rainy influence of the S. W. monsoon would prove considerable at the opening of the Paulgautcherry pass into the Coimbatore country, but as it is, there are only here experienced frequent scudding showers, which however, have the effect of making the climate perfectly cool and agreeable"

"The west wind so refreshing near the opening of the pass by the time that it reaches the eastern boundary of the Coimbatore country, is somewhat warm; and at Trichinopoly where it blows with great force, it would be almost as hot as at Madras, were it not for the extensive flooded paddy fields lying towards the west of that city, and the swollen river Cauvery over both of which it passes"

" A good deal of rain usually falls in the eastern part of Coimbatore in the month of June; but in the more western tracts near the hills, the quantity at the same period is much more considerable: there are scarcely any dews, the sky is often overcast, and the temperature of the air towards the end of the month is somewhat lower than in the preceding one: the nights are pleasant, and the Cauvery, for the most part, fills about the 12th or 15th, from the S. W. monsoon torrents in the upper countries. In July nearly the same kind of weather prevails as in June; only that in the first mentioned month, there is a little more rain than in the last. The range of the thermometer is commonly from 75° and 91°.

" About the middle of August, in this province, the west " wind becomes much more moderate and there are fre- " quent heavy showers and occasional thunder storms : soon " after this, most oppressive lulls are experienced, and the " evenings and nights become hot and close. Towards the " end of the month the river almost invariably fills, and " gentle airs, now and then, blow from the southward."

" In September the wind is variable, but the westerly still " predominates. That sultry and close weather which con- " stantly in inland situations in India, takes place as the sun " draws near to the equator, is now felt: the evenings are " most unpleasant, and the insects very troublesome. There " are occasional showers from different quarters."

" The weather in October in Coimbatore is, for the most " part, similar to that of the month preceding ; and though " rain occasionally falls, the air is often close and sultry : " the winds are light and variable, and the insects continue " troublesome."

" It has already been observed that about the middle of " this month, the N. E. monsoon commences, and that at the " same time its rainy influence is first felt in the northern " tracts of the Coromandel coast ; but the rains do not " usually reach Coimbatore sooner than towards the 6th or " 8th of November, and are generally over by the end of " December, about which time delightful cool weather " begins, with heavy dews."

Soil. The principal soils in the district are, 1st a rich red soil mixed with sand and a species of hard conglomerate, consisting apparently of small portions of the detritus of the subjacent rock, agglutinated by a clayey paste ; 2d a red soil mixed with gravel, the gravel consisting almost entirely of small pieces of quartz and small grained granite, having mixed with it a considerable proportion of sand ; 3d a soil composed almost entirely of sand

and gravel; and 4th the black carbonaceous clay, generally known by the name of cotton ground or regur which occurs in very large deposits, forming considerable plains in many parts of the district, like the alluvial clay described by Dr. A. T. Christie, "in many places (it is said to be) perfectly unmixed with any foreign ingredient, in other instances it contains nodules of calcareous tufa," and he adds, "the "black colour of this clay, the carbonate of lime, agates, and zeolites found in it, and its conversion into a black glass by heat, all indicate that it has originated from the disintegration of trap rocks." The red soils, generally speaking, do not long retain their moisture, and vary much in depth, in some places the under lying rock, which is almost invariably granite, is very near the surface, whilst in other situations of great extent, the depth of the soil is from 20 to 25 feet. The black alluvial clay, however, not only long retains moisture, but possesses great power of absorbing it from the atmosphere, and it is on this property, it is supposed, that much of its fertility depends. Its depth varies from about 6, to 20 feet.

Vegetable products. The vegetable products consist chiefly of dry grains. The proportion which the *Punjeh* or dry cultivation, bears to the *Nunjeh* or wet cultivation, has been stated to be as 97, to 3. The principal dry grains are as follows, Panicum Spicatum; Holcus Spicatus, or cumboo; Holcus Saccharatus, or cholum; Cynosurus Coracanus, or natchenny; Paspalum frumentaceum, or warragoo; Panicum Miliaceum, or samay; Panicum Italicum, fenny, or Italian panicle; Panicum Semiverticillatum, or Codraywalier samay; Phaseolus Mungo, or ulandoo; Phaseolus Radiatus, var, or panny pyre; Dolichos Catiang, or caramumay; Glycine tormentosa, cooloo, or Madras gram; Cicer arietinum, cadalay, or Bengal gram; Oryza Sativa or rice; Triticum Hybernum or wheat; Hordeum distichon, or barley; Cystisus, cajan, or towaray; to these must be added Gossypium herbaceum, or cotton; Nicotiana Tabacum, or tobacco; the

blunt leaved variety of the Cassia Senna (Senna Italica foliis obtusis) which grows wild in the jungles; the truc senna of Arabia or what is called the Alexandrine senna (foliis acutis) is not known in the province; Curcuma longa, or turmeric of two kinds, one, the ordinary turmeric of the bazars and the other, a peculiar sort found in the jungles near the Annimally hills; this latter kind is much preferred by the natives in their ablutions, and grows wild in swampy nullahs, but from its strong bitter flavour it is not used as an ingredient in their curries. Opium is prepared on the Neilgherries, in considerable quantity, and is exported, principally to the western coast, to the extent of about 2,000 pounds annually, and it is believed that this amount could be easily doubled.—Sison Ammi, seed of Bishop's weed, or womam; Cuminum Cyminum, or cumin seed; Amomum Cardamomum, or cardamom seed, are also exported in considerable quantities, and sent principally to Trichinopoly. Ricinus communis, or the castor oil plant, is much cultivated, and large quantities of both the seed and oil are exported; the Indigo plant, Indigoffera Anil, is cultivated in most of the talooks; the quantity of Indigo manufactured in 1836, was 23 candies. Santalum album, Lin: Serium Myrtifolium, Roxb: or sandal wood, is exported in considerable quantities; the tree grows in the jungly forests round the base of the hills, and the soil best adapted for the culture of it, is a strong red clay, the ground should be rather elevated, and well stocked with trees, in order that the young plants may not have too much moisture in the monsoon, and not be too much exposed to the sun when young. The sandal tree has no smell, till it reaches the age of 20 years; at 50 it may be cut, when it yields about half a candy of wood; and at the age of 100, when it is supposed to attain its full size, it produces an entire candy or 500 lbs. of wood, the value of which on the spot, is about130 rupees; the same tree yields both the white and the yellow sandal wood, the latter being the inner part, and is of great hardness and fragrance, particularly near the root; the white or exterior part, is less dense, and has but a faint odour; this tree is found to thrive

much better, and to come to maturity more quickly in its native forests, than when transplanted and carefully cultivated. The extensive forests in the neighbourhood of the Animally hills, contain abundance of teak (Tectona Grandis); black wood (Dalbergia Latifolia, Roxb:) and other valuable timber, but unfortunately too remote from water carriage to permit of easy exportation.

Much attention having lately been bestowed on the cultivation of cotton and tobacco, the following notice of the different varieties of both these important products, may not be unacceptable.

Cotton. The species of cotton at present grown in this district are six in number, viz. an indigenous annual cotton, or Oopum Purthee; indigenous triennial, or Nattam Purthee; Bourbon cotton; American cotton; green seed cotton, or Shem-Purthee; and lastly, Shedda Purthee.

1st. The indigenous annual cotton, or oopum purthee, (the term purthee literally means cotton with seed) is the staple article of the district, it is sown with most advantage in the deep black lands, it is however also grown in light soil, but with inferior produce; the ordinary method of cultivating it is as follows. The land is manured by sheep being kept on it till the month of April, and after the first fall of rain in that month, it is ploughed four or five times, the period of sowing being according to the rains either in August, September, or October, and before sowing, the land is again ploughed two or three times; this repeated ploughing answers the purpose of harrowing, and renders the land fit for the seed, which is thrown in "broad cast," like common dry grains, the seed being first steeped in cow-dung and water, or red earth and water, to prevent their adhering together; as soon as the seed is sown, a plough follows to cover it in. The plants make their appearance in 7 or 8 days; and in the end of a month in order to clear them from weeds, a light plough made for the purpose, without iron on the coulter, is run over

the ground which clears it of weeds, and thins the plants. In the second month the weeds are removed by the hand, and by this time the plants are sufficiently strong to be able to resist the influence of the weather, and are left to come to maturity. This species of cotton is generally mixed with dry grain, as Bengal gram, tennay, or castor oil, the dry grains being generally reaped in the January following ; the cotton plants in ordinary seasons, bear in February and March when the first gathering commences, and continues till the end of April ; should rain fall in the latter month, the plantation is again cleared from weeds, and in July and August, a second plucking takes place, in the proportion of about half the first crop.

The wood of this plant, when it ceases to bear, is used for making tatties and other domestic purposes, and the seed is a valuable article of food for fattening and rearing cattle ; in these respects, it has advantages over the Bourbon and American cottons, as the seeds of these plants are stated to be injurious to cattle, from being of too heating a quality.

The method of separating the seed from the wool, is by the small hand mill in common use, the charge for cleaning a maund of 25 *lbs.* being two annas, and one person can clean about half a maund daily ; the average price of the seed is one Rupee, for 6 or 8 maunds ; when cultivated on the black soil, it yields a greater portion of wool to seed, than when grown on the lighter soils, the first gathering yielding one part of wool, to three of seed, and the second one of wool, to three and a half of seed.

2nd. Indigenous triennial, or nattum purthec, this species of cotton thrives best on a soil consisting of light red loam mixed with gravel and sand, and a red stony soil, and on the light soils on which the ordinary dry grains of the country can be cultivated. Stiff and rich soils, which retain much moisture like the black lands, are unfit for the triennial cot-

ton. The method of preparing the land, and sowing and gathering the produce for the first year, is the same as that already described. In January in the second and third years, the plantation is again ploughed and cleared, and the cotton gathered at the same periods as in the first year. When the plant begins to droop, and the produce to be of inferior quality, it is extirpated before the N. E. monsoon sets in, and the land is generally left fallow for pasture, or cultivated with common punjah. Triennial cotton yields in the proportion of one of wool to three and a half of seed, and is reserved chiefly for home consumption; the mode of separating it from the seed, is the same as that mentioned in describing the annual cotton.

3rd. Bourbon cotton, this species of cotton was introduced in 1819, and is now cultivated in seven talooks; although it grows best in red loam, yet it succeeds well in all light red soils of a middling quality, and of this kind of land, it may be estimated that 20,000 acres at least, are available within the district; all black soils should be avoided. The following directions have been drawn up for the cultivation of the Bourbon cotton in Coimbatore, by a resident cultivator of the plant. "The seed should be sown "in the month of August, and care should be taken to "weed the plants for a couple of months, and secure them "by fences from the intrusion of cattle which are ex- "ceedingly fond of them, watering will be required occasional- "ly should there be no rain; the plants bear in the month of "May in the succeeding year, and do not require to be re- "newed for 2 or 3 years or more; the intervening distance "between them should be six feet, thus a cawny will con- "tain 1,600 plants, which will yield from one to two candies "of cotton; the first year will not be so productive as the "second or the third. The neighbourhood of hills should be "avoided, as the dampness of the atmosphere in their vicini- "ty is injurious to the produce, and deteriorates the quality of "cotton."

This cotton is cultivated chiefly by persons of the Vellaler,

Valloover, and Cummawer castes; the proportion of wool to seed is as one to three.

4th. American cotton. In 1831 two hundred and ninety three pounds of American cotton seed were distributed in this district, but from several causes, viz., want of rain, the seed being supposed to be too old, imperfect knowledge of the most suitable soil, and the repugnance always shewn by the natives to introduce any innovation on their old customs, it almost entirely failed, and can* now scarcely be said to exist in the district. When sown in the common black soil, the plant did not bear well; but spread into excessive luxuriance, throwing out shoots in all directions, with scarcely any blossoms, or pods; it succeeded best on the soils on which the Bourbon cotton grows, viz., light red loam mixed with gravel and sand. The method of cultivation, plucking and cleaning this cotton, is the same as that mentioned in the description of the annual cotton, and there can be no doubt, from the experiments which have been already made, that this plant would flourish in situations in which the Bourbon cotton has been succeessfully raised.

5th. The green seed cotton, or shem purthee. This cotton (called shem purthee from its dark red flower) is supposed to resemble the Brazil cotton, and is cultivated only as a shrub in flower gardens, it requires to be occasionally irrigated and is said to possess medicinal virtues; combined with other ingredients it is prescribed in inflammatory diseases by the native doctors.

6th. Shedda purthee. This cotton is also cultivated in gardens like the last, and both varieties grow to the height of 8 or 10 feet, and continue to bear for a period of 7 or 8 years, they are almost exclusively used by brahmins for making junjum, or the threads worn by them as a distinguishing mark of caste, or for lamps in pagodas.

* Within the last two or three years several American cotton planters have been sent out by the Court of Directors, for the purpose of renewing the experiment of cultivating this variety of cotton; and they are at present employed on certain farms in Coimbatore, under the superintendence of Dr. Wight.

The labourers employed in gathering cotton are paid in kind, about the value of one anna daily, of imperfect pods being given to them ; and should the crop be good, and but little injured, the amount of hire is made up with a proportion of clean cotton.

A succession of cotton crops should never be grown in the same ground, as it impoverishes the soil, and the land should therefore be allowed to remain fallow, and be manured for one year at least, before cotton is again sown in it. The expense of cleaning cotton is covered by the sale of the seed.

A large portion of the cotton produce of Coimbatore is manufactured into piece goods, for the Trichinopoly, Salem, Mysore and Malabar markets, and a considerable quantity of cloth is likewise made up for Bombay, and the Persian gulf.

Tobacco. Tobacco is the ancient staple of this district, of which there are three kinds—the first and most valuable, is called by the natives vadamoogum, it is also called yevoo macuppal, and vutticuppal ; from the thickness and softness of the leaf, its great pungency, and peculiar flavour, it is preferred for chewing by the natives on the western coast, which is the only market where it is saleable. This tobacco of the best quality is raised on land irrigated from wells, and should they contain salt-petre, the leaf is improved both in flavour and appearance, but its saline qualities render it unfit for smoking or making snuff. The vadamoogum tobacco however, raised in one part of the talook of Coimbatore, is an exception, as it is of excellent quality and fit for every purpose, and is capable of being preserved for a period of two years.

The second kind of tobacco is known by the name of tenmoogum, and is of the same description as that grown in the adjoining districts of Dindigul and Madura ; the leaf is larger than that of the vadamoogum tobacco ; it is raised by artificial irrigation, and is much preferred for smoking and making snuff, but is too harsh for chewing, and will not keep long, it is also in great request on the western coast.

The third kind is distinguished by the name of Ma-

nagherry tobacco, and is cultivated only on lands suited for dry grains, and is never irrigated, it is a perishable article, is considered of good quality for smoking and for snuff, but it is too bitter in flavour for chewing. Tobacco of a superior quality is produced in the talooks of Coimbatore, Pulladum, Cheyoor, Danaikencottah, Chuckragherry and Pullachey, and is exported to other districts, the villages in which it is cultivated being situated chiefly in alluvial plains; upwards of 4000 candies, are exported annually to south Malabar, Travancore and Cochin, large quantities are also exported to Trichinopoly, and to the Mysore country. The superiority of the tobacco grown in Coimbatore is attributable to the richness and suitableness of the soil for its culture, to its being irrigated from wells containing much salt-petre, and to the attention which is paid to its cultivation.

With regard to soil, Mr. H. Piddington in his paper on the analysis of soils read before the Agricultural Society of India in March 1836, states as follows "I believe the quality "of the tobacco to depend mainly on the state and quantity of "iron in the soil," and also adds "Colonel Hazeta and Dr. "Casanova are our authorities for saying that the tobacco soils "of the Havanna are red soils, and those of Manilla I know "are also red soil; now the red and reddish brown soils con-"tain most of their iron in the state of peroxide, or the reddish "brown oxide of iron, while the light grey soils contain it "only in the state of protoxide, or the black oxide of iron, "and from an analysis of Arracan, Singour, and Hinglee soils, he says, "it will be seen, that the best tobacco soil we have "hitherto found in India, contains 16 per cent, or nearly one "sixth of iron, which is mostly in the state of peroxide, and "that the inferior sort of tobacco, grows in a soil, containing "only 6 per cent, of iron, which is moreover in the state of "protoxide, or black oxide."*

* Mr. Piddington from finding that the ashes of Havanna, and Sandaway Cheroots contained more of the peroxide of iron than the same quantity of the ashes of the Hinglee or best Bengal tobacco, thinks it highly probable, that the flavour of the tobacco to the smoker depends on the state and quantity of iron it contains, he also states that American and English tobacconists and planters colour and flavour their tobacco by using a solution of sulphate of iron which is decomposed by the potassa of tobacco, and sulphate of potassa and carbonate of iron, which is of an ochre yellow colour, are formed.

The above observations would seem to apply in a great measure, to the soils on which tobacco is cultivated in this district, as of the four kinds in which the plant thrives best, three are red, containing the peroxide of iron, and the fourth, or black soil, in all probability contains the protoxide, in considerable quantity; they are classed by the cultivators as follows; 1st a black soil, having pieces of limestone, mixed with it, called "thersell"—2d a red soil, a mixture of sand and black soil, called "shenkersel"—3d a red soil, mixed with sand, called "sheral," and 4th a red soil, mixed with mud, called "puddagay." The tobacco is chiefly cultivated in garden lands artificially irrigated from wells, and water being near the surface, is always beneficial to the product. On the land intended for tobacco cultivation, it is a common practice previously to grow, a crop of râggee, cholum or other dry grain; from May to September, the land lies fallow and sheep are folded on it, it is then prepared for the tobacco. The usual period for sowing the seed, in beds, is in September and October, and for transplanting, November and December, the produce being gathered in the months of March and April, of the following year. The land is ploughed 6 or 7 times and divided into beds, of about 5 or 6 feet square, the young plants are watered for 30 or 40 days successively, according to the nature of the soil, and when they have thrown out 3 or 4 leaves, are transplanted into beds, each containing about 20 plants—after which they are watered every second or third day until ripe; at the end of about a month when it has thrown out 8 or more leaves, it is topped; and if it is wished to render the leaf long, from 8 to 10 leaves only are left after topping; but if short leaves are desired, from 10 to 12 are left. In the second month, the plant throws out buds, which are cautiously removed, care being always taken to keep them free from weeds. It comes to maturity in four months, and when cut it is spread out to dry. Keeping the leaves on the ground for more than one day is considered injurious to the tobacco, they sometimes however remain in the field for two days, but never longer. After the leaves have been gathered, they

are dried on the milk-hedge, which is supposed to impart a superior quality to the tobacco, but never on any other kind of hedge; and when this is not available, strong poles are driven into the ground, and the leaves are suspended from ropes affixed to them—the process of drying is continued in the open air for 15 days ; should the weather be wet, or dews heavy, it is placed in sheds, but is never smoke-dried in this district. After hanging for 15 or 20 days, and having attained a reddish brown colour, it is collected into heaps under sheds, and turned once every third day, for nine days, when the leaves are stripped from the stalk, and tied into loose bundles containing 30 or 40 in each, which are again packed in heaps and frequently turned for 10 days more ; the bundles are always packed with the stalk ends of the leaves outwards, the points meeting in the centre The last process is to tie the tobacco into parcels, weighing each about 4 lbs, containing ten or twelve bundles, when they are pressed with planks, and heavy weights, and occasionally turned to prevent their becoming injured by heat, it is then fit for the market. The tobacco raised in this district, is liable to deterioration, from scarcity of rain or of water in the wells, or from the effect of cloudy and foggy weather, and easterly winds. Should it not be sufficiently watered at the time of its being topped, the plant is liable to injury from the roots throwing out sprouts of a white appearance, resembling asparagus, called by the natives "caulum," which has the effect of preventing the full growth of the leaf, and of injuring its quality. When transplanted should the weather be unseasonably dry, the leaves of the plant become covered with spots, or scalds, known by the term "poryan," which are very injurious to the tobacco; and should the weather happen to be cloudy and foggy, at the time the plants are topped, or an east wind prevail, the leaves become white, as if ashes had been sprinkled over them, and are entirely destroyed, this blight is denominated "sambul."

The exhaustion of the land from the cultivation of tobacco is very great, rendering frequent and regular manuring ne-

cessary, it is therefore only cultivated every alternate year, with cholum and other dry grains. Tobacco is grown by all the agricultural classes, the richer ryots cultivating one third of their gardens with it, and the poorer classes one fourth; that which is exported may be estimated to cost on the spot Rupees 25, per candy of 500lbs. The American tobacco has been tried and cultivated in the same method as has just been described, it is however attended with more labour and expense; the plants are transplanted about 10 or 15 days later than the country product, and they are about a month longer in coming to maturity, and require more water. The product from the American seed is not so good for smoking or chewing, as the country tobacco, the leaves are larger and broader, but they are thinner, and have not the same strength and pungency of flavour, or, as it is technically termed among tobacco growers, "karrum."

Cattle, Buffaloes and Sheep. Coimbatore is well stocked with cattle, as the following statement of their numbers from the Jummabundy for 1836 will shew, cows 289,737, bullocks 260,111, female buffaloes 93,417, male buffaloes 27,446, sheep 425,520.

The bullocks and cows are of an excellent description, and are generally bred by the ryots on the pasture lands, which form a most valuable portion of their farms; when the pasturage fails, they are driven to graze in the jungly forests, near the western and southern hills. The best cattle are reared in the Colligal, Sattimungalum and Andioor talooks; the value of which is from 40 to 50 rupees per pair; that of the ordinary size, being from 20 to 40 rupees. Large cattle fairs are held annually in the months of April or May, at Avenashy, in the Cheyoor talook, and twice a year, in the months of February and October, in the talook of Colligal. At these fairs a superior kind of cattle is procured, which are sent to all parts of the Carnatic, being much prized for hackeries. Their colour is white, they are of a light make, bony, with large dewlaps, and very active. Some are brought to the Colligal fairs from Mysore, and from the adjacent part of Sa-

lem, but by far the greater portion is reared in the jungles, near the river Cauvery, within the district.

The breed of buffaloes, as might be expected from the very small extent of wet, or Nunjah cultivation, is of an inferior description; they are small, and not held in much esteem.

The breed of sheep, however, is excellent; and from their wool which is of a coarse kind, the cumblies and carpets in common use are made, the sheep are of a small size, and of a white, reddish brown, or black colour; they are easily fattened, and their flesh is of a very superior quality; some information in detail, received from the shepherds of this district, concerning the rearing, grazing, and diseases of sheep, will be found at the end of this report.

Silk. Silk is produced in small quantities at Colligal, it is however not of very good quality, and is of a coarser kind than the Mysore silk.

Ivory. Ivory may also be included amongst the products of this district, during the last four years, between 7 and 800 elephants have been either caught or destroyed, principally by the public establishment maintained for this purpose; the greater part of these have been females. The price of the largest and finest pair of tusks, is from 80 to 90 Rupees, and those of smaller size, from 40 to 60. Although the above is about the number of elephants, which is known to have been destroyed, both by the public establishment, and by private individuals, yet there is reason to believe, that many are killed by the inhabitants, which are never reported to the authorities. The government give a reward of 70 rupees for every elephant destroyed, at the same time taking possession of the tusks, but as the tusks of a full

grown elephant sell for more than the reward, they are therefore disposed of privately, the reward remaining unclaimed in these instances, and which are consequently not brought to account in the number killed.

A very remarkable circumstance occurred at an elephant hunt, which took place in this district in 1834. After the hunters had succeeded in driving a number of wild elephants into the coopum or enclosure, they observed that one of them, a female, bore marks on her ears, neck and legs, of having been at some previous time under restraint, or "tame," and on the usual words of command being called out to her, to their surprize she obeyed them. One of the mahouts seeing her so tame, ordered her to kneel, and had the courage to mount, and conduct her away from the others, and she has remained quiet ever since; about three weeks after her arrival at Coimbatore, she gave birth to a young male elephant, of a light pinkish fawn colour, or what is more generally known by the name of a "white elephant," which is considered by the natives of India, but more particularly by the Burmese, of great value; great care has consequently been taken of it, with a view to its being presented in the name of the government of India, to the king of Ava. This remarkable difference of colour seems to depend on the almost entire absence of the usual dark colouring matter of the rete-mucosum, as well as the pigmentum of the eye; thus apparently constituting it, an *albino* variety of the elephant.

Mineral products.

The principal mineral products of the province, are iron and steel, the ores of which, chiefly the brown hematite and black ore, are found in most of the sandy nullahs. At Topunpettah, a village about five miles to the northward of Coimbatore, the iron is produced by smelting a black sand. These ores are smelted in the ordinary native method, and from the metal obtained, nearly all the coulters of ploughs, mamaties, and other agri-

cultural, as well as domestic implements are made.

The most highly prized varieties of the Beryl, or Aqua marine, are the produce of this district; they are found near the village of Puttaley, in the talook of Kongyam, where they are stated to be associated with "Cleavelandite." A mine near that village was at one time worked by Mr. Heath, but is now closed. The largest specimen of Beryl said to be known, weighs six ounces, and is valued at £ 500, which, although supposed to have been found in Ceylon, it is probable may have been the produce of this mine.

Salt-petre in considerable quantity, is made in the district, and eighteen hundred candies were manufactured in 1836; it is said to be of inferior quality to that produced in other situations. The earth seems to contain the nitre ready formed, as no potash is added to it by the makers, it being procured simply by lixiviating the soil, and concentrating the solution by repeated boiling. Muriates are also procured by the same process, and by far the greater part of the salt used for culinary purposes, is prepared from the soil; sea salt or muriate of soda, being too expensive to be in general use amongst the poorer classes. In 1812, Mr. W. Garrow, at that time Collector of the district, estimated that 1,800 garce of salt, prepared from the soil, were consumed by the inhabitants; and although the importation of marine salt from the Malabar coast, has very much increased since that period, and its price has fallen considerably, yet even at the present time, by far the greater part of the poorer classes, from its cheapness, make use of the black impure and bitter mixture of nitrates, and muriates, called "*Attapoo*," or earth salt.

This salt as before stated, is procured in considerable quantity in the manufacture of salt petre.

Extent of cultivated and waste lands.

The extent of land actually under cultivation, amounts to 2,192,766 acres, and the uncultivated, or waste land, is at present about 1,096,561;

of the former 1,400,702 acres, are under dry, and 215,370 under wet cultivation.

The quantity of pasture land in the district amounts to 576,694 acres, which may be classed as follows:—

Pasturage,	dry land	549,954	Acres.
Do.	Garden do.	23,220	do.
Do.	Wet do.	3,520	do.

In the talooks of Pullachey, Chuckragherry, and a few villages in the talooks of Coimbatore, Pulladum and Dharapooram, the dry land yields two crops annually, whilst in the other talooks one crop only is raised. The wet land yields two crops in the talooks of Dharapooram, Chuckragherry, Sattimungalum and Errode, but one only is produced in the other talooks.

Revenue. The revenue derived from the province, in an ordinary year, may be estimated at twenty one lacs of rupees.

Roads. The principal roads generally speaking, between Coimbatore and the adjoining districts, are good, having lately been much improved, and still further improvements are in progress; the distance from Coimbatore, the capital of the province, to Madras is 315 miles, to Negapatam 220, to Trichinopoly 129, to Quilon by Choughaut 229, to Calicut by Choughaut 141, to Ootacamund 44, to Seringapatam 119, and to Bangalore 178 miles.

Population. The population as per last census, and the number of villages in each talook, are shewn in the following table.

NAMES OF TALOOKS.	Number of villages in each talook.	Population.		
		Males.	Females	Total.
Coimbatore	179	42,795	43,325	86,120
Sattimungalum	141	34,279	36,359	70,638
Danaikencottah	213	15,370	15,527	30,897
Colligal	149	21,237	21,194	45,431
Pullachey	127	27,237	31,630	58,867
Perindoray	147	28,400	29,073	57,473
Andioor	68	14,879	15,630	30,509
Errode	63	19,325	19,161	38,486
Dharapooram	41	25,490	25,278	50,768
Kongyam	42	29,377	27,987	57,364
Carroor	79	36,233	34,654	70,887
Cheyoor	105	21,447	21,567	43,014
Pulladum	89	41,398	42,589	83,987
Chuckragherry	88	30,614	31,333	61,947
Poligar Villages	50	10,173	11,403	21,576
Total	1,581	401,254	406,710	807,964

The inhabitants are almost all hindoos, the number of mahomedans, who reside principally in the talooks of Coimbatore and Colligal, being only 3,681 ; of christians, there may be estimated between 4 and 5,000 roman catholics, and about one hundred protestants.

Principal towns. The principal towns in the province are Coimbatore, Dharapooram, Bowany and Caroor.

Town of Coimbatore. Coimbatore stands in a high, dry, and well cultivated country, is neatly built, and consists of about twelve wide, well ventilated streets ; it is situated according to the grand trigonometrical survey, in latitude 10° 59′ 41″ north, longitude 76° 59′ 46″ east, the height of the ruins of the old palace in the town, is according to barometrical measurements 1,483 feet above the level of the sea ; its distance from the nearest hills may be about 5 miles. Although situated so far to the northward of the Paulghaut-

cherry pass, that it may be said to be clear of it, yet it is within the influence of currents of air, which prevail in the pass throughout a great part of the year. The town in ordinary seasons is abundantly supplied with water from wells, but being for the most part brackish, it is said to be the cause of cutaneous affections among the poorer inhabitants. The houses inhabited by the Europeans are substantially built, and generally well situated; they are placed to the eastward of the town, and with the exception of one near the jail, quite clear of it; the number of native inhabitants of the town of Coimbatore, may be estimated at about ten thousand. In the time of Hyder Ally, it is stated to have contained 4,000 houses, but it suffered much by the frequent wars between the British, and the Mysore sovereigns. Tippoo Sultan built a mosque here, and occasionally resided in the palace. At the village of Perura, about two miles to the S. W. of the town, there is a celebrated temple dedicated to Mahadeva, and called Mail, or High Chittumbra, to distinguish it from another Chittumbra near Pondicherry; this pagoda is said to be upwards of 3000 years old, and was one of the three hindoo temples spared by Tippoo, when he issued his order for the destruction of all idolatrous buildings, the pagodas of Mailcotta, near Seringapatam, and that of Seringapatam itself, forming the other exceptions.

On the south side of the town there is a tank of about three miles in length, which when full, forms a fine lake of very considerable extent. The nearest tract of jungle is distant 15 miles.

Town of Dharapooram. Dharapooram, situated in latitude 10° 47′ north, and longitude 77° 40″ east, within half a mile of the river Amberavatty, stands in a high and open country; its streets are straight and wide, and the houses are for the most part well constructed, there are here the ruins of a large mud fort, and in the vicinity is a considerable tract of well cultivated rice land.

Town of Bowany. Bowany is situated at the conflux of the rivers, Cauvery and Bowany, and is considered a place of great

sanctity by the Hindoos, and much resorted to by them, it is well built, and notwithstanding its peculiar locality, is dry and comfortable.

Town of Caroor. Caroor is situated in latitude 10° 55″ north, and longitude 78° 12″ east, and stands on gently rising ground, in a dry open country, on the north bank of the river Ambe-ravatty, near it are the remains of a considerable fort, in which there is a large temple. This town is very populous, and contains above 1000 houses. The small town of Pulla-chey, containing upwards of 300 houses, and situated in latitude 11° 47″ north, and longitude 77° 8″ east, also deserves to be noticed, as in its vicinity in the year 1800, a pot was dug up containing a great many Roman coins of the reigns of Augustus and Tiberius.

The smaller villages are for the most part exceedingly filthy, their streets are extremely narrow, and the inhabitants invariably throw the refuse of their meals into them, and also the sweepings of their houses, kites, and pariah dogs being the only scavengers. Many of the villages are surrounded by high fences of the Euphorbia tirucalli, or milk hedge, to protect them from the winds, but they of course considerably obstruct free ventilation.

The inhabitants, compared with those of many other parts of India, may be said to enjoy more comfort, their houses in the larger towns, being substantially built, and covered with tiled roofs, having a considerable slope in order to prevent the rains from penetrating. The houses of the richer classes consist of from two to five apartments, and for the most part, are dry and commodious; in the smaller villages however, they are generally built of mud thatched with leaves, and consist of but one apartment. The total number of houses in the district is 251,031; of which 15 are upper storied, 368 terraced, 11,101 tiled. and 239,546 thatched.

The whole of the wealthy inhabitants, and most of the class of cultivators, sleep on cots, especially in wet weather, and nearly all classes use coarse blankets or cumblies, made from the wool of the sheep of the district. Wood, of which there is an abundance in the neighbouring jungles, is the fuel in general use, with bratties made from cow-dung. The diet of the cultivating and poorer classes, consists of cholum, raghee, millet and other dry grains, with pulses, many of which are extremely nutritious, and upon which it is said three fourths of the population live, the remaining fourth, using rice as their principal article of food. Tobacco is consumed by all classes, either in chewing, smoking or as snuff. The rich use a considerable quantity of ghee, mutton, spices and vegetables.

Occupations. Cultivators. It may be estimated that about three fourths of the population are engaged in agriculture. The next most numerous class, is that of weavers, it being sup- Weavers. posed that there are 14,000 looms in the district, and the number of people employed on them, inclusive of women and children, amounts to about forty five thousand.

The employment of the remaining part of the population is various, there is a numerous class of petty merchants and shop keepers, in the bazar, and many who gain their livelihood by fencing, dancing, and singing for the amusement of the rich, or by practicing as conjurers on the fears of the superstitious.

Customs. Each caste has its own customs, which as in other parts of India are connected with the numerous feasts, processions, and ceremonies appertaining to their religion; or with marriages, births and deaths.

The following information having been derived from some of the most intelligent inhabitants of the district, is inserted almost literally, as being somewhat curious and interesting.

Brahmins. Brahmins are required to perform the ceremonies of yaugum and yausamus, to read the vaidum or holy book, and to teach it to others; to give alms to the poor, and to have pity on distressed people ; not to hurt or kill any creature, nor to do a dishonest action ; to seek for salvation by observing regularly all daily ceremonies, such as bathing, reading prayers, and making poojah ; to have their daughters married before they attain the age of ten years ; to betroth their sons, or make the Oopanianum, or as it is called thread marriage, before they are ten years old, and to perform the loobaum ceremony after their wives come to maturity; to perform the sreemuntum ceremony at the sixth month of the wife's pregnancy, allowing the hair of the head to grow, which has not been shaved since marriage, till she brings forth ; to perform the poonnyumjooum ceremony on the 10th day after a child's birth, and to make it eat rice at the age of six months, and have its head shaved, and to see that it is sent to school at the age of ten years.

When a Brahmin loses his father, the head and beard are shaved immediately, and he accompanies the corpse in the procession to the burning ground, carrying the fire to burn the body ; after which, ceremonies are performed daily, till the 12th day, when the funeral is said to be concluded. The son of the deceased must allow the hair of his head to grow for one year, after the death of his father, during which time monthly ceremonies are performed ; the anniversary of his father's death is also kept regularly during lifetime. If a man dies without leaving children, his brother performs the requisite ceremonies, and if he has no brother, his nephew, or an adopted son, or a person bought for the purpose, fulfils the office. The widows head is shaved, her jewels are all taken off, and she discontinues the use of turmeric powder, sandal wood, and all other cosmetics.

Sunnyassey. When a Sunnyassey or hermit dies, the body is let down into a pit, (into which salt has been thrown,) in a

sitting posture; and the head is beaten with cocoanuts until the skull is completely fractured; the pit is then filled with earth, over which a tomb is erected, a banian tree (Ficus Religiosa) is planted near the spot, and Poojahs are performed at these holy tombs.

It is estimated that there are 16,400 individuals of the brahmin caste in this district, and that there are about 100 pagodas, the duties of which are conducted by 500 brahmins, and these temples maintain about 2,000 dancing girls.

Bannyans. The Bannyan or komatie caste, observe the same rules as the Brahmins, with the exception that the funeral ceremony is concluded on the 16th day after death, and the widows are allowed to wear certain jewels.

Bainy Chetties. The Bainy Chetties another caste, marry their daughters after they arrive at puberty; they burn their dead, and their widows wear jewels; blacksmiths, carpenters, braziers, stone-cutters, and goldsmiths, also marry their daughters after they come to maturity, they bury their dead, and their widows use black clothes.

Kongoo Vellavers. The KongooVellaver caste, marry their daughters when of age, and a barber ties the wedding rope round the neck of the bride. They marry their sons while yet children, to women of age, and the father may enjoy the son's wife till the latter is grown up; it is true that very few fathers avail themselves of this privilege, although no doubt exists of their possessing the privilege if they desire to take advantage of it.

They perform funeral ceremonies for three days only, and on the fourth mix boiled rice and sheep's blood into small balls, which they throw up into the air near the grave, for the purpose of pleasing the spirit of the deceased, and for propitiating their god.

Inferior Castes. In the Thawangoo Chetties caste, (a class of weavers,) the teloogoo chetties, and arasa pullies or labourers, chucklers, oodurs or tankdiggers and pariahs, widows may marry again, the children of the deceased husband being delivered to his relatives, and should a husband and wife become mutually tired of each other, they are at liberty to separate, and each again to marry.

These castes either burn or bury their dead, and among the teloogoo chetties when the elder brother dies, it is usual for the younger brother to marry the widow.

In the Kykalurs or weavers caste, should there be three or four daughters in a family, not more than two of them generally get married, the others being either given to some temple as dancing girls, or they become prostitutes.

Oor koravurs or basket makers; in this caste the husband may sell his wife in the same way as he would sell any other part of his property, and purchase another.

Oopoo karavurs or salt merchants, may marry four or five wives, and are very strict with regard to their chastity; if a woman is caught in adultery, the caste assemble and are authorized by their own customs to put both parties to death; this of course they cannot carry into execution, but it is suspected the woman is sometimes made away with by poison.

Schools. The number of schools in the district is about two hundred, at which Tamil, Teloogoo, Hindooee, and other native languages are taught. The schoolmasters receive from each pupil from two annas, to one rupee a month.

Medical Police. Medical police may be said to be unknown, as no means are taken for cleansing the streets in any of the towns, with the exception that in the town of Coimbatore, two scavenger's carts are employed for that purpose.

The only time at which any attempt at cleansing the streets of the villages is made, is before the celebration of the different religious festivals.

Mendicants. The number of beggars is estimated at 2,000, and these are fed daily by the richer natives, charitable acts being in much esteem among them.

Marriages &c. Registers of marriages, births and deaths, have never been kept. The average duration of life in adults is estimated at about 50 years, but cases of extreme old age, such as from 90, to 100 are not unfrequent; the average however in jungly parts of the district, is below that in those more cultivated.

Diseases, Fever. The disease which has at all times prevailed to the greatest extent is fever, a mild form of intermittent being the most frequent type, when however it assumes the remittent form it is often fatal. The native practitioners generally treat an attack of fever as follows, they first administer an emetic, generally composed of the powdered seeds of tettan cottay, or strychnos potatorum, and follow this up by a purgative, consisting of one or two grains, of the powder of the seeds, of the croton tiglium; if great heat of skin continues, it is repeated, but if the skin becomes cooler, about 10 grains of the powder of the bark of the Melia Azadirachta, is given two or three times a day, or a decoction of it combined with a warm aromatic such as green ginger, or the seed of bishop's weed. This which is the general method of treating an attack of fever, is in slight cases almost always effectual. In severe cases however, (and of these the quotidian is considered the most dangerous, and the quartan the most obstinate type,) and in remittent fever, their success is very indifferent, as by far the greater number of patients, either sink under the attack in a few days, or linger on for a time under visceral obstructions, such as a morbid state of the spleen, or liver. Besides the above remedies many others are used by the native doctors, or Vytiars, such as white arsenic, in doses not

exceeding the fourteenth or fifteenth part of a grain, twice a day, in conjunction with aromatics as cummin seed, the Conessi bark, or nerium antidysentericum, Lin: this bark is also given in the form of decoction in dysenteric affections. The cinchona bark was formerly supplied by Government, and ordered to be sold by the collector at a low price, the demand for it however was very small.

Bowel Complaints. Diarrhœa and dysentery are the two next most fatal, and common diseases, the native doctors are not in the habit of distinguishing between them, both being usually treated in the same way. The remedies given in these diseases, are the powdered pomegranate fruit, twice or thrice a day in milk, the patients at the same time using as diet, a sub-acid preparation of milk, called "tyre." Some Hakeems particularly Mahomedans, give a dose of castor oil at bed time, followed next morning by a small quantity of opium, and* bangh.

There are however innumerable decoctions used in the cure of these diseases, composed of stimulants, tonics, and carminatives, according to the fancy, or superstitious prejudices, of the prescriber.

Venereal. Venereal disease is very prevalent, and commits great ravages; strong purgatives are almost entirely relied on in its cure, when however calomel can be obtained it is always given, and continued till salivation is produced.

Guinea worm. Dracunculus or Guinea worm, is another very common complaint, its cure is generally attempted by extraction, and is always more or less tedious, the native doctors are generally successful, although occasionally the worm breaks in the attempt at its removal, when ill conditioned sloughing ulcers are apt to form, which are very difficult of cure; during the progress of extraction, and as it is supposed for the purpose of facilitating it, many Vytiams cover

* Hemp. Cunabis Sativa.

the part where the worm protrudes, with a paste composed of assafœtida, garlic and rice flour.

Small Pox. Small Pox has occasionally made its appearance, and has generally committed considerable ravages; the deaths from this disease have always borne a great ratio in the higher castes, who have still a great prejudice against vaccination, amongst the lower classes however, this prejudice scarcely exists, the number of children vaccinated monthly, being at present about 230.

Cholera has also broken out occasionally, and the deaths from it have always been very numerous.

Jail. The jail is a square building, situated at the south eastern extremity of the town of Coimbatore, its position cannot be said to be very good, as it is placed close to a tank, round which at times there is a considerable extent of swampy ground, and it is also surrounded by ground broken into water courses and nullahs, in which after rain, the water for a time forms stagnant pools the receptacles of filth of every kind.

The jail contains 22 cells, 18 of which are 24 feet long, and 18 broad, they were formerly very low, and ill ventilated; very considerable improvements have however lately been made in them, having been raised from 9 to 12 feet, and in place of small circular apertures, 18 inches in diameter, on each side of the door ways, large iron barred windows, 4 feet high by 3 feet broad, have been substituted, with ventilators in the roof. The number of prisoners it is capable of containing, is 275, at 15 per cell, free accommodation being allowed, or 360, at 20 per cell which would however be rather crowded.

The ventilators in the solitary cells have likewise been much improved

Hospital. The hospital situated on the extreme right of the square, is a ward of the jail 24 feet long by 14 feet broad, into which air is admitted by three windows of the same size as those in the other cells. The windows being all on one side.

The prisoners work daily, Sunday excepted, from 7 A. M. till noon, when they rest for one hour and take food, and again work till 4 P. M,. See table at the end of the report, for diet, clothing, labour, &c.

Diet. The chief article of diet is cholum, those prisoners however who come from the Malabar coast, where rice is the principal food are allowed it, and the medical officer is authorized to order whatever food he may consider requisite, for patients in the hospital.

The prisoners who are fed on cholum, cost each 5 annas 10 pice per week, 100 rupees weight of cholum being valued at 6 pice ; 4 pice worth of curry stuff allowed to each person is included in the above amount; those who eat coarse rice, cost each 6 annas 10½ pice per week ; 80 Rupees weight of rice being valued at 7½ pice—the allowance of curry is the same as for the others.

The following tables shew the nature, and amount of disease, and mortality which have occurred amongst the prisoners during the period of ten years, from 1829 to 1838 inclusive.

JAIL OF COIMBATORE.

No. 4.—*Table exhibiting the Number of Admissions and Deaths* *the Convicted Prisoners, from each Class of Disease, for 10 years.*

CLASSES	DISEASES.	From 1829 to 1838. Aggregate strength 1,561 — 1st Half. Ad.	Dd.	2d Half Ad.	Dd.	Admissions & deaths from each class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total Deaths from each class.	Average percentage of sick to strength.	Average percentage of Deaths to sick.
Fevers......	Febris ephemera	0	0	0	0	293	18	356	19	649	37	41 ·575	5 ·70
	,, intermit quot.	216	6	249	8								
	,, remittens....	1	0	0	0								
	,, continua.....	76	12	107	11								
	Cholera	60	38	11	9	60	38	11	9	71	47	4 ·548	66 ·19
Diseases of the Abdominal viscera......	Diarrhœa	172	41	314	89	180	47	325	92	505	139	32 ·351	27 ·52
	Dysenteria acuta et chronica.	7	3	7	3								
	Obstipatio......	1	0	4	0								
	Hepatitis acuta et chronica...	1	0	0	0	1	0	0	0	1	0	0 ·061	0 ·0
Diseases of the Lungs.	Catarrhus......	2	0	2	0	2	0	2	0	4	0	0 ·256	0 ·0
Diseases of the Brain..	Epilepsia	1	0	2	1	1	0	2	1	3	1	0 .192	33 ·33
Eruptive Fevers.....	Variola........	21	0	14	2	40	0	17	2	57	2	3 ·651	3 ·50
	Varicella......	19	0	3	0								
Dropsy.....	Anasarca.......	33	15	37	20	33	15	37	20	70	35	4 ·484	50 ·0
Rheumatic affections.	Rheumat. acutus et chronicus.	39	0	38	1	39	0	38	1	77	1	4 ·932	1 ·29
Venereal affections..	Syphilis primitiva..........	3	0	1	0	5	0	4	0	9	0	0 ·576	0 ·0
	Hernia humoralis............	2	0	3	0								
Specific diseases.....	Atrophia.	1	0	0	0	145	1	35	1	180	2	11 ·531	1 ·1
	Lepra..........	1	1	0	0								
	Dracunculus....	140	0	34	1								
	Elephantiasis...	1	0	0	0								
	Scrophula.......	2	0	1	0								
Diseases of the Eye...	Morbi Oculorum..........	12	0	14	0	12	0	14	0	26	0	1 ·665	0 ·0
Diseases of the skin..	Morbi cutis.....	44	0	24	0	44	0	24	0	68	0	4 ·356	0 ·0
	Other diseases..	448	7	531	5	448	7	531	5	979	12	62 ·716	1 ·2
	Total....	1303	126	1396	150	1303	126	1396	150	2699	276	172 ·901	10 ·2

JAIL OF COIMBATORE.

No. 5.—*Table exhibiting the Number of Admissions and Deaths, of Prisoners under Trial, from each Class of Disease for* 10 *years.*

CLASSES.	DISEASES.	From 1829 to 1838. Aggregate strength 387. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total deaths from each class.	Average percentage of sick to strength.	Average percentage of deaths to sick.
Fevers......	Febris ephemera	0	0	0	0	9	2	6	4	15	6	3 ·875	40 ·0
	,, internit. quot.	6	0	1	1								
	,, continua......	3	2	5	3								
	Cholera.........	22	13	1	1	22	13	1	1	23	14	5 ·943	60 ·869
Diseases of the Abdominal viscera......	Diarrhœa.......	7	6	19	8	9	7	24	10	33	17	8 ·527	51 ·515
	Dysenteria acuta et chronica.	2	1	5	2								
Do. Lungs..	Pneumonia.....	0	0	1	1	0	0	1	1	1	1	0 ·258	100 ·0
Do. Brain..	Apoplexia......	1	1	0	0	1	1	0	0	1	1	0 ·258	100 ·0
	Paralysis.......	0	0	0	0								
Eruptive fevers......	Variola.........	4	0	1	1	6	0	2	1	8	1	2 ·067	12 ·500
	Varicella........	2	0	1	0								
Dropsy....	Anasarca,......	2	2	2	0	2	2	2	0	4	2	1 ·033	50 ·0
Rheumatic affections.	Rheumatismus Acutus.....	1	0	3	2	1	0	3	2	4	2	1 ·033	50 ·0
Venereal affections..	Syphilis Primitiva..........	0	0	1	0	1	0	1	0	2	0	0 ·516	0 ·0
	Gonorrhœa.....	1	0	0	0								
Specific diseases.....	Dracunculus....	6	1	0	0	6	1	0	0	6	1	1 ·550	16 ·666
Do. Skin...	Morbi Cutis.....	3	0	2	1	3	0	2	1	5	1	1 ·292	20 ·0
	Other diseases .	17	3	17	2	17	3	17	2	34	5	8 ·785	14 ·705
	Total....	77	29	59	22	77	29	59	22	136	51	35 ·142	37 ·500

Remarks on the preceding tables of disease.

The average annual numerical strength of the convicted prisoners during the ten years, has been 156, and the admissions 270, or nearly 173 per cent, and the number of deaths annually during the same period, has averaged 27, or 17. 680 per cent on the strength.

The admissions were greatly increased in the years of famine, 1833 and 1834, when the mortality was also much above the usual average, and again in 1837, (also a year of scarcity) occasioned almost exclusively by diarrhœa of a severe form,

cholera, and anasarca; in these three years 175 deaths occurred, and 1414 sick were treated, more than one half of all the admissions, and somewhat less than 2-3ds. of all the mortality. The average strength in these years amounted to 220.

The most numerous admissions have been from *fever*, *bowel complaints* (especially *diarrhœa*,) and *dracunculus* in the class of *specific diseases*—under the head *other diseases*, are included 129 admissions from "*punitio*." The greatest mortality has been occasioned by *bowel complaints*, *cholera*, *fever* and *dropsy*.

The number of prisoners under trial are few, the average strength being below 40; the diseases have been much the same as amongst the convicts, but more fatal.

Fever. With regard to *fever*, the most prevalent type is the intermittent, while the continued form is most fatal; of the latter type it may be remarked that no cases are entered in the returns till toward the end of 1836, while from that period up to 1838, no fewer than 183 cases are recorded with 23 deaths; on the other hand, all the cases of the intermittent type occurred during the first eight years, while no case is entered on the returns during 1837 and 1838; in 1833 and 1834 the admissions of this form amounted to 270, with 7 deaths.

Cholera. *Cholera* prevailed as an epidemic in 1829, 1833 and 1834, and of the number of cases seen on the table No 4—59 admissions, with 37 deaths, took place in these years. It is remarked with regard to this disease, that when it has occurred in an epidemic form, the cases were fewer in number comparatively in the town of Coimbatore, than in other parts of the collectorate, which has been attributed to its high and dry site, and to the streets being wide and well ventilated; it may however also be partly owing to the people being in better circumstances, and living on better food, and in more comfortable houses than in other parts of the district.

With regard to the treatment, the stimulating plan has been invariably adopted.

Diarrhœa. Of the class of bowel complaints *diarrhœa* claims attention, not only from the number of cases recorded, but also from the great mortality it has produced. This disease is always present in the jail, but in 1833,34 and 37, it may be said to have been epidemic, no fewer than 344 admissions, with 93 deaths having taken place in these years. The character of the disease will be seen from the following extracts from two of the medical reports.

" Diarrhœa has prevailed as an epidemic not only amongst the inmates of the jail but throughout the whole collectorate, occasioned by the unwholesome food on which the lower orders have been subsisting for many months past, viz. leaves, plants and roots. The jail has been filled with prisoners from various parts of the district, and many of them on admission were reduced, from long continued disease to a state of extreme emaciation; and although nutritious diet and stimulating liquids were allowed them, at first cautiously and afterwards liberally, with opiates, and medicines of an astringent and tonic nature, the system in many instances could not rally, and the patient seemed to sink simply from exhaustion."

" The *post mortem* examinations verified this, inasmuch as with the exception of a few cases exhibiting slight traces of sub-acute inflammation of the external coats of the cœcum or ascending colon, the greater number shewed a pale bloodless state of the bowels, the mucous coat being covered with thin feculent matter, and generally an effusion of serum in the abdominal cavity." Dated 31st December 1833.

" From these circumstances (scarcity of food &c.) the inhabitants have been reduced to the necessity of subsisting on pumpkins, the white and succulent part of the leaf of the common aloe, and several kinds of roots, plants and leaves; disease particularly diarrhœa has consequently been very prevalent amongst them. From the dread of starvation many have committed crimes, such as cattle and sheep stealing, and immediately confessed their guilt for the purpose of being sent into jail, to procure food at the expense of their liberty."

"The cases of this disease have been numerous, and it has proved peculiarly obstinate and fatal—nor could it be otherwise from the wretched state of the half starved and emaciated objects, which have in most instances been the subjects of it. In the treatment, opiates, tonics, astringents with wine, were found to be more beneficial than any other remedies; and blisters were occasionally applied over the abdomen." Dated 30th June, 1837.

Anasarca. The next disease requiring special notice is *anasarca*, the number of deaths being 35 out of 70 admissions, of which 45 cases, with 19 deaths took place in 1833 and 1834. Dropsical affections such as œdema, anasarca and ascites were frequently attendant upon diarrhœa, and intermittent fever. *Post mortem* examinations exhibited an exsangineous condition of the various tissues, the stomach and bowels were pale, tympanitic, preternaturally transparent, and filled with a dirty muddy fluid—the liver and spleen were shrunk and pale; the pericardium in every instance contained several ounces of fluid—and the substance of the heart when cut into, appeared as if it had been macerated.

In the treatment, stimulants internally and externally, diuretics and tonics were found most useful in checking the disease, and invigorating the system.

Dracunculus. In the class *specific diseases*, *dracunculus* merits a few remarks. It is endemic in this part of the country, and has prevailed more or less every year during the period embraced in these remarks. The period of the year in which it is seen is the dry hot season, comprehending the months of April, May, June and July, and it is worthy of observation, that the cases of this disease have been most numerous in those years in which the monsoon either entirely, or partially failed—when the tanks were nearly all dried up, and the supply of water failed in most of the wells.

The disease attacks men, women, children and adults,

the robust and emaciated indiscriminately; in most cases from two to four worms have been extracted, but in several, as many as twelve have been removed. The locality of the worm is generally in the lower extremities, about the foot and ankle. The usual native plan of treatment was had recourse to, viz. careful slow extraction, which although a tedious operation, has in almost every case proved successful, and in but few instances has it been followed by ill conditioned sores, which are so often troublesome in this disease. One death is recorded and as the case is of some interest, it may be here briefly noticed. The patient was admitted on the 10th May 1836, with a worm presenting immediately below the right external malleolus. The usual mode of extraction was resorted to, and the case went on favorably till the 13th June, when tetanic symptoms appeared, of which the patient died on the 22nd of the same month. Some irritation at the site of the worm is supposed to have been the cause of the tetanus. In the treatment blood was drawn to the extent of ℥xvj, on the first day, and opium was then given in large doses, according to the urgency and frequency of the spasms; of this medicine, in ten days, the patient took 652 grains. On the 3d, 4th, and 5th days of treatment, the symptoms abated very much, and hopes of a cure were entertained, but on the 8th and 9th, the spasms again became very violent, and resisted all the means had recourse to.

Amongst the class of other diseases, *ulcers* form a large majority, and as already stated, 129 admissions were from *punitio*, which seldom however exceeded two dozen lashes.

Sepoys health of. There is always a detachment of sepoys at Coimbatore, amounting to about 150 men, with two European officers, a captain and subaltern. The sepoys huts are situated close to the town, and the sick of the detachment are treated in a temporary building in the jail compound. Fever of the quotidian type is the most prevalent disease, it is however generally of a mild form, and easily cured by the ordinary means, such as an emetic and purgative

exhibited at the commencement, and subsequently quinine or bark. A tabular view of the sickness in this and the other detachments of native military, at the various civil stations in this division, is given at the end of this report.

REMARKS ON THE BREED OF SHEEP.

The following particulars regarding the breed of sheep, have been obtained from the native shepherds. Ewes become big with young in the months of March or April, and usually bring forth one lamb, in August or September, the rams being separated from them at this time. The lambs are not allowed to go out with the dams till they are one month old, at the end of this period however, the teeth begin to appear, when they are sent with them to graze. Sheep are turned out at 7 o'clock A. M., and are brought back to the folds or sheds, at 6 in the evening throughout the year.

Rams generally live to the age of eight or nine, and ewes to about seven years.

Soon after the birth of a lamb, the shepherd examines its colour, and other marks, and gives it a name according to its sex, such as *Kelamullah* to a ram, and *Kelamully* to an ewe the name of a *ram ending* always in *mullah*, and that of a ewe in *mully*, if the sheep from one flock should happen to stray into that of another shepherd, the owner at once recognizes it by its marks and colour, or the shepherd of the flock which it has joined, seeing that it is a stranger, turns it out. Every shepherd knows all the sheep in his flock, and he never counts them either when letting them out of the shed in the morning, or when shutting them up at night

Sheep are shorn annually in the month of January after the age of one year, the fleece of the back only is preserved, that on the other parts being rejected as useless.

The diseases to which they are subject are the following,

puffing of the belly, called by the natives *coodoonovoo,* is very frequent, and is treated by cauterizing the abdomen with a hot iron, and by squeezing the juice of a certain leaf, called oonawoodee, into the animals mouth. *Mungee-novoo* or diarrhœa, prevails during the monsoon, the remedy employed for its cure is water, in which boiled cumboo rice has been steeped for some days, great numbers however die of this disease. Another disease peculiar to sheep is called *joralavettee-novoo,* the animal it is said when attacked by it, immediately falls down and dies in a very short time ; this disease occurs only in the month of September.

Kodul-novoo or bloody flux, is not unfrequent, it is also treated by cumboo rice water, and the shepherds say, that the flesh of a sheep dying of it, induces a similar complaint in persons who eat it.

The value of a sheep is from two annas to one rupee, but if in very good condition it brings two rupees. Each shepherd generally has charge of fifty sheep, for which he is paid at the rate of 20 bullahs of grain per mensem, with an allowance in money of 4 fanams to purchase a cumbly, 1 fanam to purchase slippers, and 1 fanam for a cloth, annually.

In a flock of a hundred sheep all the rams are gelded, except four or five, this operation is usually performed in the month of September, when the animal is between one and two years old, but never at a later period. The wethers are fattened, with cotton seed, mixed with gram.

PAULGHAUTCHERRY.

Situation. Paulghaut in latitude 10° 45 north, and longitude 76° 38 east, is situated in a gap in the western ghauts 20 miles broad, and is distant from the sea, Elevation. at the nearest point on the western coast, about 45 miles, being elevated 800 feet above its level.

The surface of the country is undulating as far as the hills, which rise abruptly on either side, distant 7 miles to the north, and 13 to the south. In the eastern or inland direction, the country rises gradually for several miles, and towards the westward, there is a gentle descent to the sea.

Winds. The prevailing winds which are either easterly or westerly, are greatly influenced in their direction by the funnel like shape of the pass through the ghaut, which is more than twice as wide at the western opening, as at the eastern, northerly or southerly winds being very rare.

Mountains. The exact height of the neighbouring hills has not been ascertained. They are irregularly wooded to their summits, and are uninhabited, being very feverish during certain months in the year. In March and April considerable annoyance is felt from the heat occasioned by the spontaneous combustion of the jungles on these hills, large tracts of which are seen burning for many days in succession, but no inconvenience, further than the increase of temperature, is thereby occasioned.

Rivers. There are two rivers in the neighbourhood, the Canady about two miles to the north, and the Calpathy about one mile to the south, both running in a westerly direction. The former is fed by various streams from the hills, forming throughout the year a considerable body of water,

by means of which much timber is floated to the coast. The other stream rising in the adjoining district of Coimbatore, is smaller and more rapid, and after long droughts it is reduced to a mere succession of pools, connected by small streams. The beds of both consist of white sand, and in some places they are rocky, no slimy deposit being left on them. The banks are irregular, being pretty high in some places, and low and sloping in others. The vegetation on the one to the north is generally tall and luxuriant, whilst the banks of the southern stream are more open, and they do not seem in any way to affect the salubrity of the station.

Tanks. There are no tanks of any size in the neighbourhood, and the country from its undulating surface is well drained; noxious morasses however are found at the foot of the hills.

Noxious morasses.

Climate. The climate of Paulghaut throughout the year, is on the whole very favorable, both for Europeans and natives, but is more so for the former, than for the latter. The south-west monsoon during the months of June, July, August and September, moderates the temperature, and in the two succeeding months occasional showers occur from the north-east, which render the weather cool and pleasant, not only in these months, but also throughout the whole of December. Rheumatism and catarrhal affections accompanied with fever, are prevalent in the wet season; and scarcely any Europeans escape without suffering from catarrhs. In December and January the jungles become feverish, and early in January the heat begins to increase, and vegetation to dry up; strong land winds set in about the beginning of February, and continue all March and part of April; but the station is healthy at this season, with the exception of the prevalence of acute *conjunctivitis*, called country sore-eyes.

The weather in the latter part of April and in May, is

changeable and uncertain. The following is a copy of a register kept at this station for the year 1837, and with much accuracy.

Year and Months.	The range of the Thermometer throughout the month taken at the hottest part of the day.	REMARKS.
1837 January.	83° to 87°	Heat gradually increasing; pleasant for the first half of the month. Hot during the latter half, nights cold; strong easterly winds. Very dry, but not hot, though very disagreeable. Jungle fever at Walliar and the hills. Fever very prevalent over all the country.
February	About 90°.	Strong hot land wind during the day, but sea breeze in the evening. Mornings, evenings and nights tolerably cool.
March	Not registered.	For the first three weeks a strong hot land wind from the east. Sea breeze in the evenings. Nights and mornings tolerably cool. During the last 10 days the land wind was very changeable; blowing occasionally from different points, nights cool.
April	84° to 87½°	First four days, hot land winds, the rest of the month the weather was cooler from several showers that had fallen, and no wet tatties required.
May	79° to 93½°	Weather tolerably cool the first ten or twelve days, towards the middle of the month it became very hot, three or four close nights, but the evenings and mornings and generally the nights were very pleasant. About the 20th very cloudy and the sun seldom visible; and for the last week the weather was showery and the thermometer under 80°.

Year and Months.	The range of the Thermometer throughout the month taken at the hottest part of the day.	REMARKS.
June	75° to 84°	The monsoon extremely light no heavy rain, but weather very cloudy and showery, and remarkably pleasant.
July	71½° to 76½°	Rainy throughout the month, the sun seldom seen. The rivers full in the latter part of the month. Air very damp.
August	72½° to 79½°	Rain occasionally heavy. Weather pleasant.
Sept.	77½° to 83½°	The weather fine. A little rain the first four or five days, after which none till the end of the month.
October	80° to 86°	Weather fine but with occasional showers, some times close and oppressive before rain.
Nov.	75° to 83½°	The first six days fine, and till the 20th, a good deal of rain fell; the rest of the month dry. During the latter half strong easterly winds prevailed—very little dew in the morning for the season, but cold.
Dec.	81° to 86°	Weather cool and pleasant, nights cold. Feverish on the hills and Walliar-jungles. Common fever prevalent over all the country. Jungles on the hills on fire.

Soil. The soil throughout the district is generally light and productive, though not so fertile as in the neighbouring country of Coimbatore; and the high grounds consist of red gravel and laterite.

Water. The water of the rivers and wells is pure, and at no season do noxious exhalations arise from them, but the morasses at the foot of the hills already alluded to, exhale at

the commencement and termination of the monsoon, strong febrific miasmata.

Agriculture. Agriculture is in a very thriving condition, every available spot of land being cultivated, and the harvest is always certain, the rains seldom or never failing. Rice is the principal grain produced.

Roads and communications. Paulghaut is the point of meeting of the roads between Coimbatore and the Malabar coast; the facility with which the ghaut here is ascended, rendering it a great thoroughfare. Five roads proceed from hence, three to the westward, and two in the opposite direction, the principal of which is the great Coimbatore road, affording a safe and pleasant line of communication; the others are comparatively narrow, and generally in bad repair.

Population. The population of the talook amounted in 1838, according to the best information procurable, to 1,01,313 souls; of whom 53,056 were males, and 48,257 females. No records of marriages or births have been kept.

Diseases. Fever of an irregular quotidian type, and not unfrequently complicated with affections of the chest, is common in December and the beginning of January; and severe jungle fever becomes prevalent at the same time, amongst the natives living near the morasses at the foot of the hills, and at Walliar, in the jungle. Paulghaut with rare exceptions experiences an annual visitation of cholera; the cases though not numerous, are generally severe.

Ophthalmia. The country sore eye is very prevalent during the months of April and May, amongst Europeans as well as natives; and Rheumatism. rheumatism is also common during the hot season.

The Cantonment. The military cantonment of Paulghaut, including the fort, stands on slightly undulating and open ground, and consists of the *regimental lines, mess-house, officers dwelling houses,* and a *parade ground.* The fort

The Fort and its situation. is situated at the south-east corner of the cantonment ; it is a square fortification having round bastions and curtains, surrounded by a ditch 21 feet deep, and 15 broad; the area inside measuring 150 yards square. The buildings within the fort are placed near the walls leaving an open space in the centre, and consist of the *place of arms, barracks, magazine, store rooms, solitary cells* and *hospital;* the hospital is 87 feet in length by 17 in breadth, and is raised about 3 feet from the ground. An open verandah 6 feet wide surrounds the building, which consists of three rooms, the smallest is used as a surgery, and the others as wards for the sick; the building is tiled, and is at all seasons dry and comfortable. The rooms are lofty and well aired, and are in every way suitable for the accommodation of sick, to the number of about 30. The locality of the hospital is unexceptionable.

The Hospital.

Wells. There are two wells in the fort, both of which contain water during the entire year. The water of one is not used, but that of the other is pure and good. The fort ditch also contains water throughout the year, in the monsoon it is from 10 to 12 feet in depth, but in the dry weather it is low and becomes covered with weeds ; no noxious exhalations however, arise from it, and the water is always fit for drinking.

The lines &c. The lines lie 408 yards to the north of the fort, the parade ground intervening; the subsoil is for the most part laterite, and is soft and clayey in some places. The sepoys lines consist of a main street 25 feet wide, running north and south, crossed at right angles by eight streets, of 15 feet wide ranged at equal distances, spaces being allotted to the men in certain defined proportions ; a sepoy's hut occupies 30 feet by 10 ; a havildar's two such shares, a jemadar's two and half; and a subadar's three and a half. The streets are kept clean by means of gutters on each side.

Extent of ground allotted to each man.

Two wells faced with brick have been sunk in the lines, one of which is dry in the hot weather, and has long been disused; the other however always contains a supply of good water, but the natives prefer that obtained from a tank in the vicinity. The mess-house and officer's quarters lie westward of the fort and parade, and are scattered over a considerable space of ground.

The following table will shew the nature of the more prevalent diseases at this station, it is proper however to premise that no troops were stationed here in 1832 and 1834, and during the first half of the year 1838; while one entire regiment was located here in 1831, 33, 35, 36, and 37, and only one company in 1829 and 1830, and the latter half of the year 1838.

No. 6.—*Table exhibiting the number of Admissions and Deaths, amongst the Native troops stationed at Paulghautcherry, from* 1829 *to* 1838, *exclusive of* 1832 *and* 1834.

CLASSES.	DISEASES.	Aggregate strength 3896. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions & deaths from each class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total Deaths from each class.	Average percentage of sick to strength.	Average percentage of deaths to sick.
Fevers......	Febris ephemera	93	1	70	0	220	7	227	2	447	9	11 ·473	2 ·013
	,, intermitt quotid	57	1	105	0								
	,, remittens..	7	2	2	0								
	,, com continua..........	63	3	50	2								
	Cholera..........	6	3	8	5	6	3	8	5	14	8	0 ·359	57 ·142
Diseases of the Abdominal viscera......	Diarrhœa.......	19	1	59	2	162	3	165	5	327	8	8 ·385	2 ·446
	Dysenteria acuta et chronica	5	2	10	2								
	Obstipatio......	25	0	18	1								
	Dyspepsia......	110	0	76	0								
	Hœmorrhois....	3	0	2	0								
	Hepatitis acuta et chronica...	0	0	5	1	0	0	5	1	5	1	0 ·128	20 ·000
Diseases of the Lungs.	Catarrhus......	31	0	18	0	47	2	54	1	101	3	2 ·592	2 ·970
	Asthma........	8	0	33	1								
	Phthisis pulmonalis..........	2	2	0	0								
	Pneumonia......	4	0	1	0								
	Dyspnœa	2	0	2	0								
Diseases of the Brain	Apoplexia.......	0	0	0	0	10	0	3	0	13	0	0 ·333	0 ·000
	Epilepsia.......	1	0	1	0								
	Paralysis	2	0	0	0								
	Mania...........	3	0	0	0								
	Delirium Tremens	4	0	2	0								
Eruptive fevers.......	Variola.........	9	0	3	1	32	0	12	1	44	1	1 ·129	2 ·272
	Varicella........	21	0	3	0								
	Erysipelas......	2	0	6	0								
Dropsics....	Anasarca.......	1	0	8	0	4	0	10	1	14	1	0 ·359	7 ·142
	Ascites....	3	0	2	1								
Rheumatic affections.	Rheumat. acutus et chronicus	109	2	190	2	109	2	190	2	299	4	7 ·674	1 ·337
Venereal affections ..	Syphilis primitiva..........	49	0	26	0	77	0	51	0	128	0	3 ·285	0 ·000
	,, consecutiva..	5	0	1	0								
	Gonorrhœa.. ..	11	0	21	0								
	Hernia humoralis...........	7	0	3	0								
	Strictura urethrae.........	6	0	0	0								
Specific diseases....	Dracunculus....	7	0	1	0	21	2	15	1	36	3	0 ·924	8 ·333
	Scrophula......	5	0	2	0								
	Atrophia........	9	2	12	1								
Diseases of the Eye...	Morbi Oculorum...........	168	0	54	0	168	0	54	0	222	0	5 ·698	0 ·000
Do. skin..	Morbi Cutis....	228	0	365	0	228	0	365	0	593	0	15 ·220	0 ·000
	Other diseases..	473	3	558	1	473	3	558	1	1031	4	26 ·463	0 ·387
	Total.	1557	22	1717	20	1557	22	1717	20	3274	42	84 ·034	1 ·282

PROVINCE OF TRAVANCORE.

Situation boundaries &c.

The country of Travancore lies between the eighth and tenth degrees of north latitude, and the seventy sixth, and seventy eighth degrees of east longitude. It is bounded on the north by Malabar, on the west and south by the sea, and on the east it is separated from the Tinnevelly district, by a range of hills running from Paulghautcherry to Cape Comorin.

Subdivisions.

This Province contains three districts, viz. Trevandrum, Cochin and Quilon. The district of Trevandrum is divided into northern and southern portions, and these again are subdivided into what are called *Adigaroons*, of which Vunjeoor, Paulcolum, Wutwoorkaou, Cullicootum and Thoneycull lie in the northern division; Nelmun-puttum, Ooloor, Colatoor and Pulleapooram comprise the southern portion, in each of which there are several villages.

Trevandrum.

Trevandrum the capital, is situated in latitude 8° 30′ N., and longitude 77° 12′ E., about a mile and a half in a direct line from the sea coast, with which it is nearly on a level. It consists of a fort, in which the Rajah and his family reside, and a large town outside the walls, extending chiefly towards the north, at the extreme end of which are the barracks, and the old cantonment formerly occupied by a regiment of native infantry, and a detachment of artillery. A mile to the east of the fort, and considerably elevated above it, is the Residency, in the neighbourhood of which the medical officer resides, the hospital and the lines for the escort being close at hand. The fort is about half a mile square, has no ditch, and the walls are built of mud, with the exception of some parts of the west and the north sides, which are faced with stone.

The surrounding country has a broken and uneven aspect, presenting a series of hills covered with low bushes, with valleys of considerable extent intervening. The valleys have a rich alluvial soil, and are usually under wet cultivation.

Rivers & Canals. The rivers in the neighbourhood are the Keliar, and the Caramany, which take their rise in the hills about 30 miles to the east, and both passing south of the fort, one at the distance of about a mile, the other two miles, empty themselves into the sea. Further south, the rivers of greatest importance are the Cadayaur, and the Paralayaur, which after uniting to form the Tambrapoorny, run into the sea about 15 miles below their junction; still nearer to Cape Comorin is the Pallayaur, having its origin also in the hills, but augmented by a canal connecting it with the Paralayaur, from which it is partly fed; on these streams in a great measure depends the irrigation of the southern and most productive parts of Travancore, and works at a great expense, were constructed many years ago for the purpose of securing a supply of water to the neighbouring country, by means of canals; a canal and dams were made to conduct the water of the Cadayaur—which now passes to the sea—into the Paralayaur, but when the work was completed, it was found to be utterly useless, correct levels not having been taken in the first instance. From a late survey of the country however, between the two rivers, it is proved that such a work is quite practicable, and as the revenue resulting from it, would doubtless soon repay the expense of the undertaking, it is believed to be in contemplation to carry it into effect, under European superintendence.

A canal about forty feet wide runs to Quilon, distant forty miles, with but a partial interruption; it is supplied with water chiefly from the sea flowing over bars and consequently rises and falls with the tides; occasionally during the rains, it is in some places made subservient to cultivation, by throw-

ing up bunds to prevent the influx from the sea, but generally from the mixture of salt-water, it is rendered quite unfit for that purpose. This canal will be further noticed under the head "means of communication."

Tanks. In the southern part of the country, there are great numbers of tanks both large and small, chiefly supplied from the rivers just mentioned, but all have for a long time been neglected, and are insufficient for the proper cultivation of the paddy lands in the vicinity. In the neighbourhood of Trevandrum there are only two or three small tanks, and further north they are still more rarely met with.

Wells. Wells are common throughout the country, and the water is generally good, but in the vicinity of the rivers, the natives prefer using water obtained from them.

Mountains. The range of mountains seen about thirty miles to the east, form a part of the great chain of the western ghauts, which broken near Paulghautcherry, again rise 13 miles south of that place, and continue to run southerly until they terminate at Cape Comorin; their respective heights have not been exactly ascertained, but some of them are from 4 to 5,000 feet above the level of the sea; they present a rugged and precipitous appearance, and are nearly all densely wooded from the base to the summit; from June to October during the S. W. monsoon, they are generally completely enveloped by thick clouds. Their sides are clothed with teak and other large trees, and also with bamboos, underwood, and high grass, which, preventing the free circulation of air, tends to make them very unhealthy; so extremely noxious are they at times considered, that all who possibly can, quit their neighbourhood, and only return to them on the setting in of the S. W. monsoon, about the beginning of June, when they become nearly if not quite free from fever. Though the miasm appears to be more concentrated in the vicinity of the hills, still it is not safe during the unhealthy season, to venture into any part of the jungle which approaches to

within a few miles of Trevandrum. The teak which is of an excellent description, and in great abundance in Travancore, is floated to the coast by the streams, issuing from different parts of the mountain range.

Passes. The passes through the hills are two ; the Arambooly to the south, is considered perfectly safe at all seasons of the year, but the other the Arungoll pass, about seventy miles further north, can only be traversed during the rains, from June to December, without incurring great hazard of contracting fever. At that season of the year it affords the readiest access from Madura, and the places to the northward, but generally speaking the Arambooly pass is much more frequented. Courtallum, on the Tinnevelly side of the hills, lies near the Arungoll pass, and owes its cool climate to the constant current of air rushing through it from the western coast.

Climate. Trevandrum is generally considered healthy; the great quantity of rain which falls throughout the year, and its proximity to the sea, tend to make it cool, and at no season does the thermometer ever attain a height at all approaching to what it sometimes does in the Carnatic, seldom rising above 90° at the hottest time of the year. About the beginning of June the S. W. monsoon sets in, and continues till the end of September, during this period a great quantity of rain falls, and the thermometer seldom exceeds 75°. From October, the weather is sometimes rather close, until the setting in of the N. E. monsoon, early in November. The quantity of rain from this monsoon, though much less than from the other, assists greatly in cooling the atmosphere, and in the interval, or during March April and May, the weather is warmest, and at the same time most unhealthy. In December, January and February, the nights are cool, and the dews are heavy, exposure to which is apt to induce fever. Though the climate on the whole may be considered healthy, it is not equally favorable to all constitutions, and in rheumatic cases, or

where there exists a predisposition to pulmonary disease, the damp state of the atmosphere proves injurious.

Soil. The soil about Trevandrum varies considcrably, being light and gravelly on the hills, whilst in the valleys it is a deep black mould, formed by the decomposition of vegetable matter and alluvia, brought down by the heavy rains from the hills.

Vegetable productions. Thc vcgetable productions are numerous, and in favourable seasons supplies of all kinds are abundant, rice is cultivated in the valleys, in sufficient quantity to meet thc wants of the country, and at times to admit of exportation to a considerable extent; dry grain is not much used, and therefore but little is grown.

The trees most commonly seen in the vicinity are the jack, cocoanut, palmyra and areca ; the sago palm appears also to grow very well in this climate, and on the northern part of the coast good sago has been prepared ; pepper and cardamoms, the great sources of revenue to the Travancore government, grow abundantly, thc former all over the country, the latter principally near the base, and on the sides of the mountains ; cinnamon and nutmegs are cultivated in gardens in the neighbourhood of the hills, where they are found to thrive exceedingly well; the importation of tobacco is a monopoly in the hands of the Travancore government, and the heavy tax of 500 per cent, imposed on it, greatly limits its consumption, which is almost entircly confined to chewing. Trials were formerly made to introduce the culture of it into the country, but without success, and it appears probablc that the failure may have arisen from the ground not having bcen selected with sufficient attention to locality and soil. At Trevandrum and generally throughout Travancorc, thc climate seems to bc a great deal too moist for tobacco, but more southerly this objection does not exist, and in an experiment recently madc, ten or twelve miles north of Capc Comorin, it has been shewn, that thc

plant thrives exceedingly well. The tobacco produced from Jaffnapatam and Tinnevelly seed, was pronounced to be quite as good as any imported, and as the saving effected would be very considerable, it is in contemplation to attempt its cultivation in the south of Travancore, on a sufficiently extensive scale, to render the country independent of foreign supplies.

The mulberry grows very well, and the Travancore government are forming plantations, for the purpose of producing silk on an extensive scale. A number of mulberry plants of the best kinds, have been received from the horticultural society at Bombay, and cuttings from them have been distributed as much as possible, with every encouragement to the people to cultivate them. Coffee is at present produced but in trifling quantity, considering the advantages which the country possesses, the climate and soil being considered very favorable to its growth, and the shelter which it requires, being abundantly afforded by trees in every direction; the government are at present directing the attention of the people as much as possible to its cultivation, and with this view they are procuring supplies of seed from different sources for distribution, and issuing the necessary directions for its management. The plant is very profitable when it once begins to bear, which it does about the third year, and as the trouble and expense incurred previous to that time, is inconsiderable, it is to be hoped the culture of it will become general. At present, the market is supplied by a few private individuals.

A great many esculent roots are cultivated by the natives, and with care European vegetables are found to grow well. Fruits in general are not so good as on the other side of the ghauts; grapes seldom arrive at perfection, but the plantain and pine-apple are in great abundance, the latter at times being very plentiful in the bazaars, and at a price sufficiently low to place it within the reach of all classes.

Mineral production. Of the mineral productions of the country, one of the most useful is laterite, which is very plentiful in the neighbourhood, and extensively employed in building. It is found near the surface, and being in a soft state, is dug out with a sort of hatchet, and cut into any shape required, subsequent exposure to the atmosphere imparting the necessary degree of hardness; some quarries yield it of a better quality than others, depending on a greater quantity of iron entering into its composition. The roads in the vicinity have been made of it, and are found to be good and durable; granite is also abundant, and forms a great part of the range of ghauts, and the rocky hills in the neighbourhood. For some time past, boring operations have been carrying on, in different parts of the country, with a view to discover coal, but hitherto without meeting any indication of its presence, and the geological formation renders it improbable that the experiment will be successful.

Animals. The animals met with in Travancore, are much the same as in the other jungly and hilly parts of India; amongst the larger kinds are the elephant, tiger, bison and elk; and the list of smaller tribes, differs but little from that on the eastern side of the ghauts—hares, pea-fowl, jungle-fowl and spur-fowl are common, but neither the fox, nor the partridge are ever found on this coast, the climate of which, it would appear, is too damp for them; the black-cheetah, an animal said to be but rarely met with in the south of India, inhabits some parts of Travancore, the colour of its skin is a deep black, but when viewed in a strong light, spots are distinctly visible on it; in size it is somewhat less than the common cheetah, but in disposition more ferocious than the other varieties of this family.

Agriculture. Two crops of paddy are annually obtained in the valleys, and in favorable years an additional one of gram, but nearly all the elevated ground has been allowed to lie waste, and become overgrown with shrubs and low jungle.

The land seems in most places well adapted for dry grains, and would soon repay the labour and expense of bringing it under cultivation.

Reservoirs of water for agricultural purposes, when compared with the wants of the country, are few and insufficient. In most parts, the ryots chiefly depend on the periodical rains, and the supply obtained in this way in general suffices, but when it fails, scarcity and much misery necessarily follow. With the view to improve the irrigation of the country, an officer of Engineers was employed a few years ago in constructing tanks, and opening canals for diverting water from the rivers, into other channels.

Means of communication. The communication between different parts of Travancore is much facilitated by canals, and back-waters. A canal runs, with an interruption of five or six miles, to Quilon, by means of which intercourse with that place is carried on. An obstruction is formed in its course, by a low range of hills running from some distance inland towards the sea, and which it was proposed lately to cut through, but the estimated expense was so great, that the scheme was in consequence abandoned; circumstances have however since occurred, to render it desirable that it should be opened, and the subject is at present under consideration, with a prospect of its being proceeded with; were it completed, the convenience to the people would be great, as it now forms the only impediment to a line of water carriage betwixt Trevandrum and Trichoor, a distance of 200 miles.

The road into the Tinnevelly district, through the Arambooly pass, is in a tolerable state of repair, and so also is the northern road leading to Quilon.

Population. By a census taken in 1820 and 21, the number of inhabitants in the Travancore country amounted to 900,000, a subsequent estimate in 1836, makes it 1,300,000, giving an increase of four hundred thousand in fifteen years.

This population is scattered over a country containing 8,000 square miles, but in very unequal proportions, as some parts chiefly near the sea coast, are much more densely peopled than the hills, and the forest tracts in their neighbourhood, where the inhabitants are but sparingly distributed.

The population is composedof hindoos, mahomedans, and christians, varying in number in different districts.

Hindoos. Brahmins are very numerous, consisting of settlers from neighbouring countries, as well as the aborigines of this part of the coast, called namboories; the latter are the finest looking race, and rank first in the estimation of the people, over whom they exercise an influence, even greater than is common in other parts of India.

The most numerous, as well as most useful part of the population, are the nairs, who belong to the Sudra tribe, and are separated into a number of different classes, employed in various occupations: from amongst them are selected the Rajah's troops.

The Shanars who rank very low in the scale of caste, form a numerous body in the south of Travancore, and are chiefly employed in agricultural and other laborious pursuits.

Mahomedans. The mahomedans are nearly all mapulays, or * lubbays, the descendants of Arabs, who have been long settled in the country. They have now become a numerous body, and engage more in commercial than agricultural pursuits. There are some other musselmaun settlers, the descendants of sepoys, in the employ of former Rajahs; but the Mahomedan rule never having been established in Travancore, they are not numerous, and appear to keep themselves quite distinct from the mapulays.

Christians. The christians in Travancore, consisting of protes-

* The offspring of Arab or Mahomedan fathers, by Hindoo mothers, are so called.

tants, roman catholics, and syrians, comprise a considerable part of the population of the country.

The population of the Trevandrum district, according to the census of 1836, was 57,012; while in 1820, it was 43,583; part of this extraordinary increase is probably only apparent, for it is well known with what great difficulty a correct census is obtained, even under the most favorable circumstances. For a variety of statistical facts, relating to the former census, and other subjects, reference may be made to the tables Nos. 1, and 2 annexed, which were constructed by Captain Ward during his survey of the district.

About 5,000 of the inhabitants reside within the fort of Trevandrum, and the remainder outside the walls, and in the neighbouring villages.

Dwellings. The dwelling houses are generally speaking clean and comfortable, those of the better classes have much wood in their structure, and are usually elevated a few feet from the ground.

Diet. Such of the nair tribe as can afford it, use animal food, but for the most part, their diet consists of rice and vegetables, made into stews or curries. A common article in use is the jack fruit, which is considered very wholesome, and is consumed in great quantities, both in its ripe and unripe state ; the seeds are also converted into cakes. A tuberous root resembling the yam is likewise much used.

Living on the whole is cheap in Travancore, eleven or twelve rupees a month being sufficient for the expences of a respectable nair family, but a smaller sum often provides for all their wants.

Some of the lower classes are much addicted to the use of intoxicating liquors, and the great number of trees in the neighbourhood yielding toddy, enables them to indulge this

habit at a very trifling expense. Intemperance does not however appear to have spread much amongst the better orders.

Dress. The usual dress is in general extremely light, that of the Nairs consists merely of a cloth wrapped round the loins, made of a material thinner than that which is in common use by the natives of other parts of the Presidency; a piece of gauze or thin cloth, thrown loosely over the head, is used as a substitute for the turban, and affords but little protection against the rays of the sun, but when required, the umbrella or palmyra chattah, with which people rarely go unprovided on this coast, answers all the purposes of a thicker head dress.

Employments. The great bulk of the population, consists of agriculturalists, artizans, and fishermen. About 2000 Nairs are employed in the military service of the Rajah.

The inhabitants of all classes are very much attached to their country, and they can seldom be induced to quit it by any advantages held out to them.

Crime. Crimes are not very frequent, and those which do occur, are not often of an aggravated kind. Thefts of a daring character are seldom committed, and offences of the more grave form are usually confined to the Mapulays.

Customs, &c. The natives of Travancore are strong and active; the Nairs in particular, are a good looking robust race, and in the greater number of instances fairer than the people of India usually are; in their habits they are commonly quiet and orderly, but in many respects their morals are very depraved, and their marriages, if such a name can be given to their alliances, are of so loose a nature as to allow an almost unrestrained intercourse between the sexes, the natural consequence of which is, an unusual prevalence of venereal disease. The number of objects met with in the streets, as well as those who apply for assistance, with this disease in its worst forms, sufficiently evince the extent to which it prevails.

Education. Education to a certain extent is general, the middle classes are usually able to read and write their own language, and in the better ranks, a knowledge of English is not at all rare; the means of acquiring other branches of education have lately been afforded, the Rajah having established a very excellent free school at Trevandrum, under the superintendence of a European master, and also auxiliary schools, with competent native teachers, in other parts of the country.

Poor. In Trevandrum, the proportion of poor is unusually large, and although charitable institutions have been opened where rice is distributed gratuitously, still the number who have little more than sufficient to support life, is very great.

Diseases. Elephantiasis. The diseases met with, are in general much the same as in other districts, in the southern parts of India. There is however one, *Elephantiasis*, or as it is vulgarly called the *Cochin leg*, to which the natives of Travancore, in common with those of the greater part of the western coast, are very subject, and which must attract the attention of every person on first arrival; cases are constantly met with at this place, and along the northern part of the coast, and in the Cochin country it is still more frequent. The disease usually commences with severe pain and swelling in the limb, attended by fever, which symptoms generally subside in a few days, but return for some time at uncertain intervals, whilst the extremity continues to increase on each attack, until it attains in most instances an enormous size. The pain which attends the early stage of the disease usually abates after some time, and little or no inconvenience is felt, except from the great bulk of the limb; and the subject of it is able to pursue his ordinary occupation. In some cases the leg preserves a smooth appearance, but in others it becomes studded with large warty excrescences. The disease in this part of the country, is almost exclusively confined to the lower extremities, one or both of which may be attacked; and both sexes are equally the subjects

of it. The natives attribute this as they do almost every other complaint, to the peculiar quality of the water which they use, but meagre diet is doubtless a predisposing cause; for although the richer natives are not exempt, it appears to be much more common amongst the poor. Europeans have rarely been known to suffer from elephantiasis. The natives consider the disease incurable, and attempt nothing for its relief. In obviating the fever and pain at the commencement, antimonials and evaporating lotions to the limb, are of some use, but medical treatment has generally been ineffectual, in preventing the progressive increase of the limb.*

The annexed Table of diseases, treated in the Rajah's Public Hospital, from its establisment in 1838, to 1842 inclusive, will give some idea of the state of disease, of the poorer inhabitants of this part of the country.

* The hydriodate of potassa ointment in the proportion of ʒi to ℥i of lard has been found useful in a case of Eliphantiasis occurring in a Sepoy of the Nair Brigade. The remedy was assiduously applied for about a month when the limb was reduced to nearly its natural size, although the disease had existed for two years. The improvement in this case, which was treated in 1842, has up to the last account been permanent. In addition to this remedy there is no doubt but much benefit would result from change of air and especially of water, but unfortunately the persons usually affected with Elephantiasis, have not the means of resorting to change of climate.

TREVANDRUM PUBLIC HOSPITAL.

No. 7.—*Table exhibiting the number of admissions and deaths, from each Class of disease, for 5 years.*

CLASSES.	DISEASES.	1838.		1839.		1840.		1841.		1842.		Years 1838 to 1842 inclusive.		Ad.&Dd. from ea. class of disease.		Average percentage of deaths to sick.	Out Patients treated principally within the last 2 years——994.
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died	Admitted.	Died.	Ad.	Dd.	Ad.	Dd.		
Fevers......	Febris ephemera	3	0	1	0	2	0	0	0	4	0	10	0	16	0	0	
	,, intermit. quot.	2	0	0	0	1	0	2	0	1	0	6	0				
	Cholera.........	0	0	0	0	7	3	0	0	1	1	8	4	8	4	50 ·0	
Diseases of the Abdominal viscera......	Diarrhœa.......	3	2	0	0	0	0	0	0	2	1	5	3	142	28	19 ·718	
	Dysenteria acuta et chronica.	23	8	56	8	16	0	15	4	10	4	120	24				
	Colic...........	0	0	0	0	0	0	6	0	1	0	7	0				
	Obstipatio......	1	0	0	0	0	0	0	0	0	0	1	0				
	Dyspepsia......	2	0	1	0	1	0	0	0	1	0	5	0				
	Hœmorrhois. ..	0	0	0	0	0	0	1	0	1	0	2	0				
	Spasmus........	0	0	0	0	0	0	0	0	2	1	2	1				
Diseases of the Lungs and Heart.	Catarrhus......	2	0	0	0	3	0	4	0	1	0	10	0	14	2	14 ·285	
	Phthisis pulmonalis...	1	1	0	0	0	0	0	0	1	1	2	2				
	Pneumonia.	0	0	0	0	0	0	0	0	2	0	2	0				
Do. Brain..	Paralysis.	2	0	0	0	0	0	1	0	1	1	4	1	10	1	10 ·0	
	Amentia.	0	0	0	0	0	0	0	0	2	0	2	0				
	Cephalalgia.. ..	0	0	0	0	0	0	0	0	4	0	4	0				
Diseases of the Eye ..	Ophthalmia....	0	0	17	0	5	0	4	0	0	0	26	0	26	0	0	
Eruptive fevers......	Variola.........	0	0	0	0	0	0	6	1	26	8	32	9	34	9	26 ·470	
	Varicella........	0	0	0	0	0	0	0	0	1	0	1	0				
	Erysipelas......	0	0	0	0	0	0	0	0	1	0	1	0				
Dropsics...	Anasarca.... ..	0	0	0	0	0	0	0	0	3	0	3	0	116	27	23 ·275	
	Ascites...... ..	7	2	49	11	21	0	29	10	7	4	113	27				
Rheumatic affections.	Rheumat. acut. chronicus	38	1	124	3	35	0	33	4	15	1	245	9	245	9	3 ·673	
Venereal affections..	Syphilis Primitiva..........	25	0	54	1	18	0	30	0	25	0	152	1	237	4	1 ·687	
	,, consecutiva.	1	0	0	0	0	0	3	0	9	1	13	1				
	Bubo....	8	1	9	0	8	0	9	0	19	0	53	1				
	Gonorrhœa	3	1	5	0	0	0	3	0	8	0	19	1				
Specific diseases.....	Lepra..........	0	0	1	0	3	0	2	0	1	0	7	0	76	1	1 ·315	
	Scrophula......	0	0	0	0	0	0	1	0	5	0	6	0				
	Dracunculus ...	2	0	0	0	0	0	0	0	0	0	2	0				
	Impetigo.	0	0	0	0	0	0	0	0	1	0	1	0				
	Atrophia.., ...	1	0	17	0	12	0	23	0	7	1	60	1				
	Wounds and Injuries.........	0	0	0	0	0	0	3	0	1	0	4	0	4	0	0	
	Ulcers..........	164	5	295	3	225	6	184	2	86	5	954	21	951	21	2 ·201	
	Other diseases..	18	1	24	0	26	2	34	0	31	1	133	4	133	4	3 ·751	
	Total....	306	22	653	26	383	11	393	21	280	30	2015	109	2015	109	5 ·409	

Fever. Fevers, as has been before remarked, prevail very much at certain times, particularly amongst those who are exposed in the jungles. The inhabitants of Trevandrum suffer cccasionally from fever during the dry season, but not to a very great extent, whilst the European residents and escort, appear to be but little subject to it. Both the intermittent and remittent forms are met with, the former generally yields to purgatives and antimonials, and its return is prevented by the use of an infusion of chereyta, or cinchona; but the remittent is often very intractable, requiring more active measures, and in the jungles where it is impossible to procure proper aid, a great many are supposed to be annually carried off by this disease. The people employed to collect cardamoms, and in felling teak timber, and who are often required to be in the neighbourhood of the hills, during the unhealthy season, suffer much. In persons who have experienced repeated attacks, organic disease is of course very general, and dropsies are often met with in debilitated subjects.

Cholera. Cholera some years ago visited the country, and carried off great numbers of the inhabitants; but only occasional or sporadic cases, have since been met with.

Bowel complaints. Diarrhœa and dysentery, both in the acute and chronic forms, not unfrequently occur during the rainy season, and are sometimes severe, requiring local bleeding, blisters, with the use of calomel or blue pill, and ipecacuanha, in their treatment.

Pulmonary complaints. Pulmonary complaints are not uncommon, and well marked cases of phthisis are sometimes seen.

Small pox and vaccination. Sporadic cases of small pox are met with, but the disease is kept in check as much as possible, by the large vaccination establishment, supported by H. H. the Rajah in Trevandrum, and throughout Travancore.

Rheumatism. Rheumatism is very common, and during the rainy season it often obstinately resists every mode of treatment that can be devised. Purgatives, with alterative and diaphoretic medicines, rubefacient liniments and blisters, form the ordinary remedies.

Venereal. It will be seen by reference to the table, that venereal diseases are exceedingly prevalent on this coast, where it is found to exist in its most virulent form; secondary symptoms exhibiting scaly, papular, pustular and tubercular eruptions, ulceration sometimes destroying the tonsils, velum and uvula, and extending to the nares, and larynx, are by no means unfrequent; and several cases have presented themselves at the hospital, where on looking into the mouth, there appeared a vast ulcerated cavity involving the palate and lower part of the pharnyx.

The treatment adopted both in the primary, and consecutive forms, has been in many instances, a mild alterative course of plummer's pill, *never given with a view to affect the system,* as the greatest dependence was always placed on the compound decoction of sarza, in combination with the iodide of potassium, about a pint of the former with two or three grains of the latter taken in divided doses, during the day, and continued until the sores healed. In cases where buboes formed, previous to admission, the hydriodate of potassa ointment was freely applied over and around the enlarged glands, provided no fluctuation could be detected, and in general with great benefit; but in those cases where suppuration, or extensive destruction of the parts had taken place, and sinuses formed, the plan adopted has been the free application of the iodide of potassium solution, ℈ij to ℥j of water, to the ulcerated surface, the sinuses being injected with the same, this was also used to sores on the penis, particularly if presenting an unhealthy appearance. In many cases the cartilages and bones of the nose had been destroyed previous to admission, but even in this stage of the disease, and in one or two instances where the entire nose, and part of the upper jaw had been destroyed, the disease was completely arrested by this application, along with

the decoction, and the iodide of potassium internally. Two sketches of cases treated in this manner with success are here given.

Leprosy. This disease is very prevalent particularly amongst the lower orders, nor are the higher classes exempt from it, and it is generally believed to be both hereditary, and contagious ; there is however no doubt but its prevalence, is greatly to be attributed to poor diet, and inattention to cleanliness.

Scrophula. Several very inveterate cases of this formidable and troublesome disease, came under treatment, in most instances affecting the glands of the neck, and throat, and occasionally those in the axilla. The treatment consisted in the exhibition of the compound decoction of sarza, about a pint daily, with two or three grains of the iodide of potassium, the tumours being freely touched with the compound tincture of iodine morning and evening ; besides which, the ointment of the iodide of potassium (ʒj to ℥j) has been kept constantly applied to them. When suppuration commenced, and the sores appeared foul, with a tenacious pale slough adhering to them, its separation has been accelerated by the free application of lunar caustic, afterwards the iodide of potassium solution, of the strength of ℈ij to ℥j. of water, is found to heal the sores and sinuses readily.

Malabar Itch. Psora is also very general and frequently assumes a virulent, and obstinate form, and indeed well merits its appellation of "*the Malabar ;*" it is no doubt occasioned by the poorer classes subsisting so much on fish, which is often from partial decomposition unfit for food, and the effluvia from which on passing the market places, is sometimes almost intolerable.

The most effectual treatment in this disease is the local application of sulphur and mercurial ointments, in the proportion ℥j of the former, to ʒj of the latter, sulphur and cream of tartar electuary being at the same time given internally, in the more obstinate and chronic cases.

Ulcers.

The extreme prevalence of ulcers of various characters, on this coast, is proverbial, and it would be difficult to form any classification of them, suffice it to say, that amongst them leprous, and venereal sores, are conspicuous, as well also as those of a phagedenic, and sloughing character; many of these cases have been traced to repeated attacks of lues venerea, and in the greater number, the constitutional treatment has consequently been the same, as that adopted in secondary syphilis. In sores of a leprous character, the usual application is an ointment composed of the hydrarg: nitrico oxydum ʒj, to ℥j of the ceratum resinæ, which cleanses and stimulates the sores much better than any other application, aided by a wash consisting of a solution of chloride of lime, of a strength adapted to the different cases. Frequently washing the sores with chloride of lime, tends materially to accelerate the cure, by destroying the acrimonious and corroding nature of the discharge, and preventing them from spreading.

Births, deaths.

No registers of births or deaths, have ever been kept in Travancore, and therefore no information on these subjects, on which any dependence can be placed, is procurable.

Climate unfavorable to Cattle.

The climate of Travancore is considered unfavorable to some kinds of cattle. The cows of the country are diminutive, and miserable looking animals, the quantity of milk which they yield is very small, and those brought from other parts of the country soon degenerate. The same is the case with regard to sheep, none are reared by the inhabitants in Travancore, and the supply required for the markets, is brought from the Tinnevelly and Coimbatore districts.

Horses, here as well as all along the western coast, are very liable to become weak in the loins, particularly if exposed to the wind, when much heated; castration is often resorted to as a preventive, and it seems to be generally admit-

ted, that geldings suffer less frequently than entire horses; when attacked with this complaint the animal is rendered completely useless.

Hospitals. The only hospitals at present in Trevandrum, are one for the sick of the Nair brigade, and another for the reception of the sick poor. The latter is divided into four wards, two of which are appropriated for patients of the higher castes, and the others for persons of low caste; the building is calculated to contain altogether about seventy-five patients, who are dieted at the expense of the Travancore government.

Barracks, The barracks, are situated about a mile and a quarter to the north of the fort, on high, dry and airy ground, they are sufficiently extensive to accommodate a native regiment, and a company of artillery; but since the force was withdrawn some years ago, they have remained unoccupied, they however still continue to be kept in good repair.

No. 1.—*Statistical Table for the Trevandrum District.*

TREVANDRUM, DISTRICT.	Villages.	Area of the district.	Estimated extent under paddy cultivation.	Population to the square mile.	Number of Houses.	Number of Poray-eddums or Gardens.	Cocoanut, Areka and Jack trees, &c. under Revenue to Government.	Kullaul or Arrack and Toddy Shops, &c.	Ploughs, spades, &c. agricultural Implements.	Bullocks, Cows and Buffaloes.	Reservoirs and Wells.	Religious buildings of all description.	Public buildings, Vyeumbalum, Oottapurrans, Chowkies, &c. &c.	Palmyra Trees.
Southern Division.														
Nelmun Adigaroon	8				3401		117,054	93	301	2090	285	40	19	
Puttom	4				599		29,697	30	235	1313	246	20	2	
Ooloor	4				757		58,600	22	745	1397	228	39	6	
Colatoor	8				795		64.801	23	736	1161	81	39	2	
Pulleapooram	7				668		57,903	25	628	1444	103	51	13	
Total	31	99¼ square miles.	11¼ square miles.	4,402	6223	10,383	3,28,055	193	3348	7405	943	189	42	9168
Northern Division.														
Vunjeoor Adigaroon	9				1692		118,282	63	1093	633	155	24	25	
Paucolam	6				759		83,920	65	729	693	454	30	0	
Vutteoor Kaou	7				957		63,182	15	804	2174	52	29	6	
Callecoottum	4				1059		37,424	0	440	730	251	18	4	
Thoneycull	4				1202		61,217	9	555	1272	303	19	4	
Total	33				5679	9484	367,025	152	3621	5502	1215	120	39	8094

No. 2.—*Table shewing the population of the Trevandrum District.*

TREVANDRUM, DISTRICT.	Brahmins of various castes, and chettries included.	Umblawassy or different caste of Varior, Maroyen, Pesharodee, &c. connected with the religious establishment.	Nairs, including all denominations.	Different classes of Washermen, Weavers, Barbers, Potters, &c.	Konganees, Puppadachetties and Koodoomecarras, &c.	Various castes of Tamil from the Eastern coast.	Various castes of artificers, Smiths, Carpenters, &c.	Musselmen, Jonah's Mapullays, &c. &c.	Christians of every description.	Eelavars or as they are indifferently, Shovans, Teans in which class is comprised the whole of the lower order.	Pooliars, Parriars or the different classes of predial slaves.	Total number of castes	Total of Males.	Total of Females.	Total population.
Southern Division.															
Nelmun Adigaroon........	3249	86	1988	292	41	612	224	1066	568	1161	709	53	5220	4776	9996
Puttum........	46	35	1263	217	0	57	192	3	0	385	625	37	1420	1403	2823
Ooloor........	116	67	1572	64	0	261	204	74	0	914	559	42	1916	1925	3841
Collatoor........	20	17	1250	108	0	53	133	209	1122	676	481	30	2078	1967	4045
Pulleapooram........	64	76	1064	67	0	238	149	967	0	672	580	36	1983	1917	3900
Total........	3495	281	7137	748	41	1221	902	2319	1690	3808	2964	198	12,617	11,988	24,605
Northern Division.															
Vunjeoor Adigaroon........	921	200	2298	192	0	873	287	119	0	406	284	43	2919	2661	5580
Paucolam........	98	41	1204	96	0	213	67	31	276	819	391	29	1594	1642	3236
Vutteoor Kaou........	18	216	1785	42	0	287	279	84	0	661	1001	36	2464	1909	4373
Callecootum........	168	120	1131	38	0	67	76	185	27	391	327	34	1280	1250	2530
Thoneycull........	60	112	997	16	0	71	150	584	51	616	602	31	1601	1658	3259
Total........	1265	689	7415	384	0	1511	859	1003	351	2893	2605	173	9858	9120	18,978

Note.—The following is the result of the census of 1836.

Male Adults........	19,631	
,, Children......	9,374	
		29,005
Female Adults......	20,386	
,, Children......	7,621	
		28,007
	Total	57,012

Account of a recent attempt to explore the Travancore Mountains.

The high range of hills in the vicinity of Trevandrum, never having been thoroughly explored,—although unsuccessfully attempted many years ago, by captain Sheridan of the Nair brigade, lieutenant Noble, and captain Green of the Engineers,—the Resident of Travancore accompanied by several gentlemen, started from Trevandrum on the 24th of February last, via Arienaad to visit these hills; the road as far as Arienaad distant 16 miles, was found very tolerable, frequently traversing considerable tracts of paddy ground, and steep ridges covered with jungles; halting here during the 25th and 26th, the next march was to a place called Caviatten Coodul, eight miles nearer to the base of the hills, through a very picturesque undulating jungly country, by an old tract laid down on the map, passing over several elevated ridges, but upon the whole the road was found tolerably good.

Here the party encamped for two days, on the banks of a branch of the Kurramonay river, at an elevation of 430 feet above the sea, while parties were sent to explore the country towards the hills. From thence they started after breakfast, on the 1st March, and pursued their course through beautiful forests, and over some ridges, until they came to a small river at the foot of the hills, called the Attyaur, 1,230 feet above the level of the sea, and after a short halt, commenced ascending the hill through a dense, and almost impenetrable forest of magnificent trees, which afforded a complete shade from the rays of the sun, rendering it cool and pleasant; otherwise it would have been an arduous undertaking in the heat of the day, from the steepness of the ascent, leading directly up the acclivity of the mountain, as native roads usually do.

After ascending the first ridge, a kind of promontory or projection of rock, where there appeared the remains of an old barrier was seen, from which there is a splendid view of the country below; a little higher up, there is a plateau of some extent, covered with noble forest trees, and pursuing

the route over another ridge, a dense low jungle was entered apparently the abode of elephants, and innumerable other wild animals, whose foot prints were observable in every direction.

The party next shaped their course to the right, over very rough ground, until they attained an altitude of 3,980 feet, where an encampment was formed about 3 P. M., by the side of a small rivulet, there being no prospect of gaining the summit that day, the line leading to the top of the range not having been cleared or explored.

The encampment here presented a very lively scene, from the number of people employed constructing temporary huts, and the bustle and confusion, which prevailed.

The natives very soon began to shiver from the change of temperature, although to Europeans it felt delightful. The splendid view of the Augastier peak, towering far above, a little to the south, occasionally capped with clouds, and again bursting forth during gleams of sunshine, was truly sublime. The enjoyment also of the cool delicious water, was a source of much gratification after the fatigues of the day, which however were felt but slightly from the coolness of the temperature, and exhilirating atmosphere, as compared with the heat of the encampment below, where the thermometer stood at 90°.

Towards evening, great piles of wood were collected, in different directions all round the encampment, and set fire to, as well to frighten away elephants and tigers, as to afford warmth to the natives.

The European gentlemen who slept on mattresses on the ground, in a small tent, found it rather cold during the night, and in the morning on looking at the thermometer, it stood at 65° Fahr. All complained of being unable to sleep for a great part of the night, perhaps from the cold, but more probably from the effects of the rarefied air.

It was found in the morning, that all the coolies had run

away just before day light, although they were amply supplied with rice, and every attention had been paid to their wants. But the dread of wild animals, and especially of venturing into elevated or unexplored regions, felt by them, is such, that it is difficult to induce them either by fair means or force, to accompany such expeditions; and in consequence of this *contre temps,* the encampment was necessarily obliged to stand fast; however, after breakfast on the 2d March, the party proceeded towards the summit of the ridge, which after many difficulties, and having had almost literally to cut their way, the whole distance of about two miles, they at last emerged from the jungle, and ascended its highest point.

The extensive view of the Travancore country, which presented itself, with the sea in the distance, as well as that looking towards Palpanassum, on the Tinnevelly or east side of the hills, was truly magnificent. Here a considerable plateau of table land exists, at an elevation of 4,740 feet, as measured by the barometer. The highest peak of the range was estimated at about 6,000, and the Augastier peak, a little further to the southward, at about 7,000 feet, which is nearly as high as Ootacamund, and no doubt posseses a similar climate---several other high peaks, appeared at various distances, both to the north and south. On exploring the table land in various directions, the whole surface was literally trampled by elephants, seemingly from its being a place of retreat for them, from the jungles below; and in some of the small sholas, or open clumps of jungle, the prints of tigers were seen.

The surface of the table land was generally rocky, although considerable portions of sward were seen here and there, but time did not admit of exploring further.

It is in contemplation shortly to make another excursion to these hills, when it is hoped more extensive discoveries will be the result.

The benefit of having such a climate, within so convenient a distance must be apparent, and possibly a sanatarium may be established on the Travancore hills, possessing advantages, nearly if not equal to those of the Neilgherries.

COCHIN.

Situation boundaries, &c.

Cochin, one of the oldest of the Dutch settlements in India, is a maritime district in the province of Travancore, lying between the 9th and 10th degrees of east longitude; it is bounded by the ocean on the west; the province of Malabar on the north; by the range of mountains commonly called the western ghauts, on the east; and Travancore proper on the south.

Town of Cochin.

The town of Cochin itself, while in possession of the Dutch, was surrounded by a rampart, ditch and other works, rendering it a place of security, for the extensive commerce which they carried on, in this part of the country. The fortifications however, after its surrender to the English, were dismantled, and nothing now remains to point out their situation, further than the mound of earth, the remnant of the old rampart, which surrounds it on the land side, and is now a disadvantage, from in some degree preventing free ventilation.

Most of the streets of Cochin run in a south-westerly direction, and the houses which were built at a subsequent period by the Portuguese, are mostly two stories in height, and though of large dimensions, still from the internal arrangement, and the manner in which they are crowded together, they are not very well adapted for a warm climate; and the small enclosures in the rear of each, surrounded by walls of from 14 to 16 feet in height, prevent a due circulation of air.

Backwater.

There are no rivers of importance in the district, but the backwater from its great extent, the fertility which it diffuses over the country, and the facility of communication which it affords, is deserving of particular notice, being to Cochin, what roads are to other countries. Taking the

town of Cochin, as a starting point, the back-water may be described as branching to the southward and northward, extending in the former direction nearly to Quilon, and in the latter as far as Chetwa, a distance of about 40 miles; in its course it subdivides into numerous branches, which ramify in an easterly direction, and to the westward it communicates by three estuaries with the sea, viz. at Chetwa, Cranganore and Cochin. It is very shallow in many places, more particularly in the northern part of the Chetwa branch, but between the inlets at Cochin and Cranganore, and the former place and Alleppy, situated about 30 miles to the southward, it is at all times navigable both for passage and cargo boats; from Alleppy however, to the bar of Ivica near Quilon, it becomes gradually shallower. During the rains every part is navigable, flat bottomed boats being employed, but for the conveyance of small merchandize, canoes drawing but little water are preferred. The back-water is affected by the tides, which rise about two feet, and flow at the rate of 2½ miles an hour; it is tortuous in its course, and somewhat sluggish, but affords to the merchant a safe, and convenient means of transport for his goods, to the marts of Cochin and Alleppy, as also to the cultivator, of carrying his produce without much trouble or expense to the best market; another very important advantage is, that the communication is open at all seasons of the year. The cargo boats are covered with mats, made either of bamboo or cadjans, by which the goods, are protected both from the effects of the sun and rain.

There is a succession of hills and valleys, throughout the greater part of the district, the hills are generally covered with a low thick prickly shrub, and the valleys laid out in rice cultivation, and plantations of cocoanut trees.

Climate. The weather is more variable at Cochin than on the eastern coast, or in the interior of the country. The sea breeze, which blows during the day, is generally from the

westward, changing at times to the N. W. and S. W. The land wind from the N. E, which sets in at night, passes over so extensive a surface of water before reaching this place, that it is changed from a hot and parching, to a cool and sometimes chilly breeze, a free exposure to which during sleep is attended with danger. The south-west monsoon or wet season, begins about the end of May, and continues to the end of September, during which time the pluviometer gives an average fall of 72 inches of rain, and the thermometer indicates an average temperature of 78°; the remaining months constitute the dry season, during which the thermometric average is about 85°. The climate is at all times more or less moist, and occasionally very sultry, but frequent showers of rain reduce the temperature, and prevent it becoming at any time very hot or arid; a continued drought is almost unknown, and the people are never subjected to the miseries of scarcity, or famine. On the whole, the climate although relaxing, and never so cool or bracing as in other parts of India, especially in the morning, possesses the advantage of being more equable in temperature throughout the year.

Soil. The soil varies considerably. To the north it is gravelly, in many places clayey, and strata of laterite abound; southward it is sandy, but immediately on the banks of the back-water, there is an alluvial deposit, from the annual overflowings—occasioned by the heavy rains near the sources of the rivers, and which occur once or twice during the S. W. monsoon, completely inundating the villages on their banks. The effects on the paddy crops, are either beneficial or the reverse, according to circumstances; if the seed has been but lately sown, or if the plants are very young, considerable injury is caused, the crop being liable to fail altogether.

Malaria. Disagreeable exhalations arise from the banks of the back-water, and are more particularly perceptible, during the dry season; it has been however found, that the health of the inhabitants does not suffer in any marked degree

thereby,* and the people are as healthy looking, as those who live in drier parts of the district—the miasm being probably counteracted in some degree, by the purifying effects of the sea breeze.

Vegetable productions.

The vegetable productions of the country are the plantain, breadfruit, jackfruit, mango, pineapple, tamarind, guava, lime, citron, water-melon and pumpkin—among roots the yam, sweet potatoe, and the arrow root—the articles of merchandize, which are exported to various foreign marts are principally pepper, and cardamoms (both of which are monopolies of the Circar, or Rajah of Cochin,) also ginger, turmeric, cassia, betel nut, nux vomica and coculus indicus,

Among trees the teak stands pre-eminent, but there are also other valuable forest trees, as the angely, jack-tree, blackwood, ben-teak and bastard cedar. The Malabar teak is well known for its superiority both as regards its specific gravity, and closeness of grain. The angely is generally used in the construction of houses, and small vessels; it is by no means so durable as teak, but is preferred on account of its cheapness; a species of fir, known by the name of "Viney" is also valuable for the resinous juice which it yields, and which is substituted for varnish—the above trees, grow chiefly in the northern parts of the province viz., in the Talloopilly, Chittoor and Trichore districts; the cocoanut flourishes most luxuriantly in the southern parts, it delights in a sandy soil, and thrives in proportion to its proximity to the sea coast, requiring little or no culture.

Domestic animals.

The cattle are very diminutive, cows afford but a scanty supply of milk, and bullocks are almost useless for carriage or agriculture,—buffaloes however thrive well, and are used for the purposes of labour; sheep introduced from the neighbouring zillahs fall off very quickly, but pigs and poultry are abundant.

* Also remarked of the district of Quilon.

Manufactures. The manufactures of the district are chiefly arrack, cocoanut oil, coir and jaggery; sugar cane is not cultivated to any great extent, although the country offers every facility for its growth, and it might be turned to the greatest advantage. The mode of manufacturing sugar is little known to the natives of this part of the coast.

Agricultural produce. Cotton is grown in small quantities, and is of an inferior quality to that produced in Tinnevelly, on the eastern side of the ghauts.

Coffee of excellent quality, has also been partially cultivated; the resources of the province are indeed great, and only require capital with a spirit of enterprize to develope them, and turn them to advantage.

The attention of the natives in general is directed to the cultivation of paddy, no arable lands being allowed to lie waste; the supply of rice frequently exceeds the demand of the market, the surplus being shipped to Colombo, and other places; and besides rice, a grain called "chama" is largely produced. The paddy fields on the banks of the back-water yield but one crop annually, but in other parts of the country, as at Trichoor, and throughout the northern districts, two and in some parts of the Talloopilly district, even three crops are annually produced. The principal one however in all the districts, is grown during the S. W. monsoon, the sowing time being the months of May or June, according to the locality of the field; and the harvest is gathered in September or October. The second crop is sown, soon after the reaping of the first, and is by no means so plentiful as that in October, it is gathered in January and February. The abundance of the harvest depends, entirely on the supply of rain, for the agriculturist here, does not possess the means of artificial irrigation. The mode of culture is regulated by local circumstances; buffaloes are chiefly used in the tillage of the ground, when the nature of the soil admits of it, but in many parts of the country, it is entirely performed by

manual labour; the implements of agriculture are of the most rudeand imperfect kind, that in use for turning up the soil, being but a sorry representative of a plough—the sickle however, resembles that commonly used in Europe, though of smaller size.

Vast tracts of the higher lands are lying waste, from the apathy and indolence of the natives, and their unwillingness to engage in any branch of industry, that does not promise an immediate return.

Labour is very cheap—the daily hire of the free labourer varying from 2 to 4 annas, according to the nature of the work, but cultivators of the soil receive only one anna.

Roads. The means of communication being chiefly by water, there are consequently but few roads, the principal one runs along the coast from Alleppy, and those about Trichoor are particularly good, as the country abounds in laterite.

Population. The inhabitants residing outside the old fort, are chiefly native christians, while those occupying the town, are for the most part of Portuguese or Dutch extraction; with the exception of a few of the Dutch families, who either derive small pensions from government, or are possessed of private property, the great mass of the population of Cochin, from being in possession, at no very remote period, of considerable wealth, are now reduced to a state of great poverty. They are however generally cleanly in their persons, and about their dwellings, though not particularly industrious, nor anxious to quit the place with a view of improving their condition in life.

Castes. The prevailing castes throughout the country are *namboories* or brahmins, *nairs* or the military caste, *chagoweas*, artificers of all descriptions, *mooguas, kanakas* and *pellers*, constituting the hindoo portion, the remainder consists of *mapalays*, and christians of the following sects viz. roman catholics, romo-syrians and syrians.

A census of the population is annexed, and also a list of the different religious establishments and schools, see tables No. 1, and 2.

Namboories, or priests. The *namboories* or priests, who maintain an unbounded influence over the inferior castes, have an extraordinary custom with regard to marriage, which seems deserving of notice, inasmuch as it is opposed both to the brahminical law, and to the usage which prevails in every other part of India, viz. that of restricting the privilege of marriage to the eldest male member of the family.

Nairs. The *nairs* are of the soodra caste, and physically considered are a fine race of men; their most striking and obvious characteristic, is a cringing humility towards superiors, or in the presence of those by whom they hope to be benefitted, and a display of arrogance and tyranny, when these qualities can be exercised with impunity. The marriage ceremony amongst this caste, if marriage it can be called, is very simple, and consists merely of the bridegroom, in the presence of his friends and relations purposely assembled, presenting a cloth to the bride, and tieing a string round her neck; the engagement is as easily dissolved as formed, for on either party becoming dissatisfied with the other, they separate, and the relationship of husband and wife ceases from that moment, each being then at liberty to enter into a new engagement. The nairs are for the most part, either employed in the public offices of government, or in agricultural pursuits.

Chagoweas, and Kanakas. The chief occupation of the *chagoweas,* and the *kanakas* is that of gathering the fruit, and extracting toddy from cocoanut trees, and the *mooguas* are fishermen.

Pellers. The *pellers* are chiefly occupied in cultivation, they are slaves and in some instances fixtures, being only transferrable to another owner, with the land on which they

and their progenitors were born, but generally speaking they do not possess this privilege, but are saleable at the will or caprice of their owners.

Hill people. Besides those above enumerated, there is a race of people inhabiting the mountains and jungles, called *hill people ;* they are regarded with abhorrence and contempt, even by the pellers, who consider themselves defiled by coming in contact with them, these wretched out-casts from society, reside altogether in jungles, and rarely visit the villages, but are often seen by travellers on the road side ; their appearance and gestures are scarcely human, and they subsist chiefly on fruits, roots and such animals as they can succeed in entrapping.

Christians. The christians are engaged in various occupations, such as traders, agriculturists, fishermen, coolies, &c. ; the same may be said of lubbays, except that they never become fishermen ; the mahomedans who form but a very small portion of the community, are either peons in the service of government or of private individuals, or traders.

The amusements of the nairs, and other inhabitants of this country are so intimately connected with their religion, that it is difficult to draw any distinction between the one and the other for every amusement partakes of a religious character ; they are by no means fond of manly or athletic exercises, preferring those of a sedentary nature ; they practice games with cards, (the substitute for which is the ollak or leaf of the palm) and chess, in playing which the namboory brahmins pass half their existence.

Water. From the proximity of Cochin to the sea, its low site, as well also as from the soil being composed entirely of loose sand, the ground on which the town stands, and that in its vicinity, is damp, water being found immediately below the surface ; the water is brackish and considered unwholesome, it is however used by the lower orders, while the higher classes seldom employ it in any culinary opera-

tion. The supply of drinking water is brought by boats, kept up by government, from a river near the village of Alwye, 15 miles distant, this river takes its rise in the hill country to the north-east, and empties itself into the backwater a few miles above the town of Cochin. The water as it passes the village mentioned, is extremely pure, and the inhabitants of Cochin during the hot months, repair in great numbers to this place, for the purpose of bathing. The higher classes have a number of small comfortable bungalows on the bank of the river while the poor form a large encampment in the neighbourhood.

Food. Rice prepared in various ways, and vegetable curries, constitute the chief food of the namboories, who abstain from flesh and spirituous liquors; they use sugar, which is considered a luxury, largely and in various ways, and its consumption is only limited by their means. The nairs eat animal food, beef and pork excepted, and the chagoweas and mooguas only abstain from beef. Fish both fresh and salted, forms a principal part of the diet of the inhabitants residing on the coast, not however from choice but from cheapness. Spirituous liquors are indulged in by most castes.

The rich natives are often corpulent, which is perhaps attributable in some degree to the use of ghee, largely consumed by them with the view of attaining that enviable condition, by which it may be observed one native judges of the wealth, and respectability of another.

Clothing. A simple cloth worn round the waist, constitutes the only article of dress of the hindoos; the texture of this is usually sufficiently close, but on some occasions the namboories and nairs, substitute a fine transparent muslin, and are then as far as decency is concerned, in little better than a state of nudity—those who have intercourse with Europeans, wear an upper dress, and the lower castes are also more substantially clothed. The females are but very scantily covered,

and go with the bosom uncovered.

Habitations. The houses of the inhabitants are either built of brick and wood, or of leaves and mats, and contain several apartments, the style and materials varying according to the wealth of the owner.

The houses of the namboories and nairs, are kept particularly neat, while little attention is paid to cleanliness by the christians, or inferior hindoos.

Notwithstanding the fertility of the province, many of the inhabitants are destitute of the common necessaries of life, and have no means of procuring them, there being scarcely any field for industry, for however anxious they may be to labour, they can find but few who need their services. Rice-lands constitute the chief wealth of those parts of the province which are cultivated, the labour as before stated, being performed by slaves, the property of the landed proprietors ; the free-labourer is therefore chiefly employed in cooly work, such as conveying loads from one part of the country to another. There is no middle class here, the people being landed proprietors and renters of government lands, or slaves and coolies ; labourers are abundant, and wages low, and if the land now in an unproductive state was brought into cultivation, the change would necessarily be widely beneficial. The poor in the neighbourhood of the sea, are generally in better circumstances than those in the interior, from the trade there carried on offering a wider range of employment, such as in building yards, and in the manufacture of coir rope, oil, &c. The poverty of a great portion of the people, is increased by the habitual use of toddy and arrack, unfortunately so cheap and abundant as to be within the reach of all ; the native christians too, are much addicted to intemperance, and it is lamentable to see amongst them as well as others, its pernicious effects exemplified, by a cachectic appearance, and premature old age.

No tables of marriages, births, or deaths, are kept by the Cochin Circar.

Medicine and Surgery.

The professions of medicine and surgery are quite distinct; they are hereditary employments, and the most intelligent youths are selected for their study; the pupil usually receives as good an education as can be attained, of which a knowledge of Sanscrit for the former is indispensable, and his medical tuition commencing about the age of fifteen years, is carried on under the instruction both theoretical and practical, of his father. He is afterwards subjected to a public examination; their practice is timid and peurile.

Surgical operations are here much dreaded, and consequently but little practised, the namboory practitioners occasionally venture to bleed.

Town of Trichoor.

In the northern part of the district, and about 50 miles from Cochin, is situated the town of Trichoor, the second in importance, and which is much celebrated for its sanctity. The fortifications which formerly encompassed the town, have been destroyed, and it is now garrisoned by a company of the native regiment stationed at Paulghaut. It contains very excellent barracks, an hospital, store houses and a magazine.

The sepoys are hutted in the vicinity, on raised and dry ground, the officer's bungalow being near the lines, and the station is considered very healthy.

In 1835, 37 and 38, a detachment of a native regiment was stationed here, the average strength of which was 142 men; during these three years, from an aggregate strength of 428 sepoys, the admissions into hospital amounted to 267, with 5 deaths; four of which were from cholera, and the fifth was occasioned by ganrgene of the penis and scrotum, succeeding venereal ulceration of a malignant nature.

The number of admissions from the more important diseases were as follows; from *fever* 55, (of which 46 were of the intermittent type,) *cholera* 4, *diarrhœa* 9, *dysentery* 3, *rheumatism* 25, *venereal complaints* 22, with one death as mentioned above, and of *cutaneous diseases,* chiefly itch, 54 ; it may be remarked that no admission took place from those which have been classed as *specific diseases.*

There is a native tannah court, and jail, at this place.

The principal communication with Cochin and Choughaut, is by water, the road leading to Paulghaut being little better than a defile through jungles, infested with wild elephants, and other animals, and is moreover very unhealthy from November to March.

Table No. 1.—*General Population, for* 1836.

SUB-DIVISIONS.	Houses.	Males.			Females.			Grand Total.
		Men.	Boys.	Total.	Women.	Girls.	Total.	
Cochin	10,703	15,451	10,080	25,531	16,295	9039	25,334	50,865
Cannianoore	8413	16,763	10,512	27,275	18,303	10,295	28,598	55,873
Moogoondaparum	8511	14,008	8713	22,721	14,275	8353	22,628	45,349
Trichoor	9815	17,615	9057	26,672	17,888	7867	25,755	52,427
Tallapilly	9858	17,004	9131	26,135	16,737	8558	25,295	51,430
Chittoor	4186	6500	3805	10,305	6956	3178	10,134	20,439
Cranganore	2232	3298	2690	5988	3404	2401	5805	11,793
Total	53,720	90,639	53,988	144,627	93,858	49,691	143,549	288,176

Table No. 2.—*A List of the different Religious Establishments and Schools, in the Cochin Circar.*

SUB-DIVISIONS.	Hindoo Temples.			Mahomedan Mosques.			Synagogues.			Churches.			Schools.						
	Pagodas.	Places of worship for inferior castes.	Total.	Moorinen.	Cutch.	Total.	For white Jews.	For black Jews.	Total.	Syrian.	Roman Catholic.	Total.	English.	Malialum.	Tamil.	Mahratta.	Sanscrit.	Hebrew.	Total.
Cochin..............	67	150	217	18	1	19	1	4	5	2	40	42	2	16	4	0	0	2	25
Cannianoore..	209	245	454	3	0	3	0	2	2	6	21	27	2	15	1	1	0	1	20
Moogoondaparum..	299	200	499	3	0	3	0	1	1	0	9	9	0	10	0	0	0	1	11
Trichoor............	347	301	648	0	0	0	0	0	0	0	15	15	0	12	1	0	1	0	14
Tallapillay..........	392	289	681	0	0	0	0	0	0	6	6	12	1	10	0	0	0	0	11
Chittoor............	60	45	105	4	0	4	0	0	0	0	2	2	0	4	3	0	6	0	13
Cranganorc.........	37	93	130	2	0	2	0	0	0	0	1	1	0	2	0	0	0	0	2
Total......	1411	1323	2734	30	1	31	1	7	8	14	94	108	5	69	9	1	7	4	96

QUILON.

Situation. Quilon is situated in latitude 8° 53′ N., and longitude 76° 39′ E., about 50 miles north west of Trevandrum, the capital of Travancore. The ground on which the cantonment stands, rises by a gentle ascent from the sea, and includes an area of nearly five miles in circumference. It was formerly the head quarters of a subsidiary force, consisting of a company of European artillery, one European regiment of infantry, and three corps of sepoys, but for many years past, it has been occupied by the head quarters only of one native regiment; there is no natural boundary between the military cantonment and the Travancore territory, but a broad road round the cantonment, points out the line of demarcation.

Water communications. Between Trevandrum and Quilon, the communication is almost solely by means of canals dug parallel with the low sandy coast, and connecting the different lakes, formed by the back-waters. There is also a Roads. military road adapted for wheeled carriages, though at present out of repair, and but little frequented owing to the greater facility of water communication. Northward to Alleppy and Cochin, all communication is by water; but horses and cattle can travel by an ill-formed sandy road, along the sea beach. In a north-easterly direction, there is also a line of communication with the Tinnevelly district, by a pass through the hills, but it is more properly a foot path, than a road.

Mountains &c. About 25 miles east of Quilon, is a lofty range of hills separating Travancore from Tinnevelly, the summits of which are between two and three thousand feet above the level of the sea; they are covered with thick jungle, and no part of the range adapted for a sanatarium, has yet been dis-

covered; the period of the rains, and immediately after, being the only time when it is believed they can be visited with impunity, especially by Europeans; as passing even a single night on them, between the months of February and June, produces fever of a dangerous and fatal character, almost to a certainty.

Fish, especially mullet, abound in the back-waters, and alligators are also said to frequent them in great numbers; in the neighbourhood of Quilon these animals are small, and by no means dangerous, but further north towards Alleppy, they are of a large size, and people are sometimes carried off by them.

The land overflowed by the back-waters, is in some places hard and gravelly, in others sandy, and in others again, slimy and muddy; in the latter situations rice is generally cultivated close to the water's edge, and strange as it may appear,the rice grounds as observed in the account of Cochin, are not supposed to generate noxious exhalations.

Rivers. Numerous mountain streams flow into the back-waters, in the rainy season, but in the vicinity of Quilon, there are only two deserving the appellation of rivers, the Ittagherry to the south, and the Pattanaueram to the northward, both of which are navigable for boats, to the distance of about twenty miles inland; their banks in the low country, form rich paddy lands, while nearer to their sources, they become steep and lofty, and are covered with thick, and in some places, nearly impenetrable jungle; like all mountain streams they become dried up after the cessation of the rains. The influence of the tide extends only a few miles from the sea, and in the monsoon is scarcely perceptible. Alligators and otters, are found in great numbers in these streams. The foregoing observation, relative to the cultivated grounds on the edges of the back-waters, are applicable to the cultivated lands on the banks of the rivers; which for a distance of twelve miles from the sea, are supposed to be free from noxious miasm.

Water. Excellent water is found in abundance all over Quilon, a few fect from the surface; and although in the centre of the cantonment there is a considerable patch of swampy ground, a pure stream flows through it at all times, and successive crops of paddy are cultivated over its entire surface.

Canals. In Travancore as already mentioned, canals have been dug to connect the different sheets of water, affording great facility in travelling, and for the transport of goods; those to the northward, are works of old standing, but those to the south, have been dug within the last nineteen or twenty years. The soil through which they have been cut, is usually a sandy quartz; they are navigable throughout the year by the largest sized canoes, but their depth varies considerably in the different seasons.

Climate. The climate of Quilon, and of the surrounding country, is very agreeable and healthy. The wet season commences about the beginning of June, and lasts till the end of October, the prevailing winds being from the south-west, and the average fall of rain is about 120 inches; the dry season which succeeds, is at first accompanied by strong land winds, during the night and morning, with a sea breeze at mid-day and in the afternoon; the nights and mornings afterwards become sultry, and in the month of May immediately before the setting in of the monsoon, the weather proves very debilitating.

From observations made in 1835 and 36, the highest range of the thermometer noted, has been 88°, and the lowest 69°, the former at 3 P. M., during the months of April and May, and the latter immediately before day break, during the land winds, in the months of December and January; the medium of the thermometer has been about 81°.

The barometer generally stands at 30, nor has it been observed by a gentleman resident at the station for several years, to vary more than half an inch annually.

To the European constitution the climate, though upon the whole healthy, is at the same time enervating. Although the thermometer seldom rises to 90°, a moist heat generally prevails, and there is never any bracing or cold weather; consequently after attacks of illness, recoveries are slow, and invalids sent to this coast from the interior, after the first few days, do not convalesce so satisfactorily as on the Coromandel side.

Soil. The soil of Quilon, and its immediate neighbourhood is sandy, the highest part of the cantonment being about 40 feet above the level of the sea. In the vicinity of the beach the sand is white, consisting of nearly pure quartz, while further inland it is of a brown colour, from containing oxide of iron. In the interior, the country is undulating presenting a constant succession of hill and valley; the hills, composed chiefly of laterite, are partially cultivated with natchnee and other dry grains, while the soil of the valleys, is a rich loam, yielding abundant crops of paddy. The valleys in the immediate vicinity of the hills, are usually covered with verdure, from the numerous mountain streams, or rivulets flowing through them.

Vegetable productions, forests, &c. The vegetable products are pepper, cardamoms, cinnamon, ginger and betel nut; coffee is also cultivated in considerable quantity, and is of excellent quality; near the coast there are numerous topes of cocoanut and palmira trees, and there are extensive forests of valuable timber trees in the northern part of Travancore, which produce superior teak; mango and jack wood trees also grow luxuriantly, and in great abundance.

Cattle, &c. There are numerous herds of small, elegantly formed cows, resembling the English breed, found all over the country, which are esteemed very sacred by the hindoo part of the population. Buffaloes of small size are likewise numerous, and goats are very common, but no sheep are bred, and those imported fall off, and die in a very

short time, the pasture on the sea coast proving very deleterious to them.

Wild animals. The jungles of Travancore abound in wild animals, such as the elephant, the bison, the royal tiger, the cheeta, several species of deer, the wild hog and many others.

Diseases of cattle and horses. During the hot season, considerable numbers of cattle are destroyed by eating too freely of the succulent vegetables growing near the banks of the backwaters, which produces a tympanitic state of the bowels, usually followed by suffocation. Horses in this climate are very liable to become weak in the loins; the nature of this disease is not correctly understood, but it appears to be an affection of the spinal marrow causing paralysis, or an approach to it, of the animal's hind quarters. A permanent cure has seldom or ever been effected, castration as mentioned in the report for Trevandrum, would appear to be the best preventive, mares and geldings being very rarely attacked by the disease. This disease is most frequent during the land winds in November, December and January.

Silk worm. The silk worm has long been bred, but from the deficiency of mulberry trees, little silk is produced.

Iron Ore. Magnetic iron ore is found in considerable quantity in different parts of Travancore, and in greatest abundance at a place called Koondra, ten miles distant from Quilon; it has never been worked to any extent.

Agriculture. From the ample fall of rain during the monsoon, wet cultivation is carried on without the aid of tanks, there being always sufficient water for the production of rice, on every spot of ground calculated for that purpose, and therefore the crops are seldom if ever known to fail.

Roads in the Cantonment. The roads in the cantonment and its immediate neighbourhood are excellent, being composed of laterite broken into small pieces, and well beat

down upon the sandy soil. The cassarina tree which was introduced several years ago, has arrived at great beauty and perfection, and lines most of the roads, forming beautiful avenues.

Diseases.

Epidemic disease is rare in Quilon either among the troops or native population, and visitations of Cholera seldom occur; itch, and indolent ulcers of the lower extremities, are the diseases most prevalent among the sepoys, and their families, attributable to the nature of their diet, which consists chiefly of fish; mahomedans, owing to their more generous mode of living, suffer in this respect less than hindoos; cases of elephantiasis are occasionally met with in Quilon, and its vicinity, but in the north of Travancore, and in Cochin, this disease is very prevalent, few families being altogether exempt from it.

Fever and dysentery.

Fever and dysentery are the principal diseases of the natives; the former being usually contracted by a residence in the jungles, during the dry season. The treatment adopted in fever, by the native practitioners, is the exhibition of purgatives, of which castor oil and croton, are the most common, followed by mercury; from the indiscriminate use of the latter remedy, injurious effects are often observed. Dysentery is treated by astringents only, and is by far the most fatal disease.

The prison at Quilon is under the charge of the Travancore authorities, and the number of its inmates generally varies, from 120 to 150; the sick being attended by a native doctor. The most prevalent diseases are ulcers and itch, with occasional cases of fever, and dysentery, in the treatment of which, European medicines are seldom exhibited.

Births, marriages, deaths.

No register of births, marriages, or deaths, has ever been kept, nor has any correct census of the population been made; but the number of inhabitants in Quilon, may be computed at about 20,000.

Barrack. A barrack for European troops is still standing in the cantonment, which was appropriated during the period of a subsidiary force being stationed in Travancore, for a company of foot artillery; it has however been unoccupied since 1830, and is fast falling to decay.

Hospital. There is also a European hospital situated about 400 yards from the barrack, on somewhat higher ground.

The returns of sick of the European part of the subsidiary force are found to be so incomplete, that the usual table of diseases cannot be compiled from them; but a table shewing the prevailing diseases, in a native corps stationed at Quilon for four years, from 1835 to 1838 inclusive, is here appended.

No. 8.—*Table exhibiting the Number of Admissions and Deaths, amongst the Native Troops stationed at Quilon, from* 1835 *to* 1838 *inclusive.*

CLASSES	DISEASES.	From 1835. to 1838. Aggregate strength 3118. 1st. Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions and Deaths from each class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers......	Febris ephemera	93	0	55	0								
	,, intermit quot	33	1	22	0	141	2	92	0	233	2	7 ·472	0 ·858
	,, remittens....	5	1	4	0								
	,, com cont....	10	0	11	0								
	Cholera.........	0	0	46	26	0	0	46	26	46	26	1 ·474	56 ·521
Diseases of the Abdominal viscera......	Diarrhœa.......	20	2	31	0								
	Dysenteria acuta et chronica.	7	2	16	1								
	Obstipatio......	14	0	27	0	56	4	117	1	173	5	5 ·548	2 ·890
	Dyspepsia......	13	0	41	0								
	Hœmorrhois. ..	2	0	2	0								
	Hepatitis acuta et chronica...	2	0	7	0	2	0	7	0	9	0	0 ·288	0 ·000
Diseases of the Lungs	Catarrhus......	8	0	48	1								
	Asthma.........	2	0	11	0								
	Phthisis pulmonalis..........	1	0	1	0	16	1	65	1	81	2	2 ·597	2 ·469
	Pheumonia	1	1	1	0								
	Dyspnœa	4	0	4	0								
Diseases of the Brain.	Apoplexia......	1	1	1	1								
	Epilepsia.......	0	0	1	1								
	Paralysis.......	1	0	3	0								
	Amentia........	3	0	1	0	5	1	8	3	13	4	0· 416	30· 769
	Mania..........	0	0	1	0								
	Delirium Tremens...........	0	0	1	1								
Eruptive fevers......	Variola.........	0	0	0	0								
	Varicella..	8	0	2	0	9	0	2	0	11	0	0· 352	0· 000
	Erysipelas......	1	0	0	0								
Dropsies....	Anasarca.......	0	0	4	0	0	0	6	0	6	0	0· 192	0· 000
	Ascites.........	0	0	2	0								
Rheumatic affections.	Rheumat. acutus et chronicus.	72	0	151	2	72	0	151	2	223	2	7 ·152	0 ·896
Venereal affections..	Syphilis primitiva..........	23	0	26	0								
	,, consecutiva.	0	0	2	0								
	Gonorrhœa.....	11	0	10	0	41	0	53	0	94	0	3 ·014	0 ·000
	Hernia humoralis.............	7	0	14	0								
	Strictura urethrae..............	0	0	1	0								
Specific diseases.....	Lepra...........	0	0	3	0								
	Dracunculus....	4	0	0	0	10	0	20	2	30	2	0 ·962	6 ·666
	Atrophia.	5	0	12	2								
	Scrophula......	1	0	5	0								
Diseases of the Eye	Morbi Oculorum..........	12	0	30	0	12	0	30	0	42	0	1 ·347	0 ·000
Do. skin..	Morbi Cutis	204	0	338	0	204	0	338	0	542	0	17 ·382	0 ·000
	Other diseases..	257	0	399	0	257	0	399	0	656	0	21 ·039	0 ·000
	Total......	825	8	1334	35	825	8	1334	35	2159	43	69 ·243	1 ·991

DISTRICT OF TINNEVELLY.

Situation & boundaries. The district of Tinnevelly forms the extreme eastern portion of the Indian peninsula, and lies between the 8th and 10th degrees of N. latitude, and the 77th and 78th degrees of E. longitude; it is bounded on the north by Madura; on the south and east by the gulf of Manaar; and on the west, by a chain of mountains which separate it from the province of Travancore.

Principal towns. The principal towns are Tinnevelly the capital of the district, and the residence of the collector; Palamcottah a military station; and Tutecoreen formerly a Dutch settlement.

The general aspect of the country presents a flat appearance, with small rounded stony hills interspersed here and there, the plain extending for several miles, both to the northward and westward of Tinnevelly, and Palamcottah; and the country being more level, than in the opposite directions, it is also more fertile, from being extensively irrigated by cuts from the Tambaravary river. This river deposits a considerable quantity of alluvium annually on the rice lands. In the south eastern direction, the country is barren, the soil being light, covered with stones, and only suitable for dry crops.

Soil. The soil is generally of a very red, almost rusty colour, from the presence of iron, and contains a large proportion of sand, forming a clay but sparingly adhesive, and not very fertile; it however produces rice in limited quantity, with a good deal of cotton, and other dry crops; palmira trees grow well in it,

Vegetable produce.

plantations of these trees being scattered over the whole plain; they attain to a large size, from which circumstance it may be inferred that the soil contains a considerable saline admixture, and also, that water is near the surface.

Town of Tinnevelly. The town of Tinnevelly is situated on the right bank of the Tambaravary river, from which it is distant about one mile and a half, and two and a half miles from Palamcottah, on the opposite side of the same river; —it contains a population of nearly 20,000 souls.

A substantial bridge has lately been thrown across the river, by which the intercourse between the town of Tinnevelly and Palamcottah, which formerly in the monsoon season was completely cut off, is kept up, and has proved of considerable advantage to the inhabitants of both places.

Jail. The jail, formerly at this station, was removed in 1838, to the fort of Palamcottah, in the description of which place both it, and the jail hospital, are described.

PALAMCOTTAH.

Situation and boundaries, &c. The fort of Palamcottah elevated about 120 feet above the level of the sea, is situated on an extensive plain, one mile east of the Tambaravary river.

Fort. The fort is built on a bed of granite rock, of a mouldering character, and for the most part bare of soil. Some portions of the rock within the walls, are hard, close grained and durable under exposure to the atmosphere; though it is generally soon reduced to an angular quartoze gravel, by the disintegration of the hornblend, and its separation from the quartz and felspar of which the rock is composed. The neighbouring hills consist principally of pure white quartz, and seem to be the remains of more extensive ranges of a less permanent character, and which in the lapse of ages, have mouldered into the soil composing the surrounding plains.

It may be stated generally, that the fort stands on a part of the plain slightly elevated, and that being built on a naked rock, and not having a wet ditch, it appears to be in a great measure free from the ordinary sources of malaria, with the exception of some low grounds and tanks, immediately to the northward; but as the tanks which are filled from the river, are shallow, the water being generally drawn off for the purposes of irrigation, and not allowed to stagnate, they do not seem productive of disease.

Wells. In the fort there are numerous wells which are abundantly supplied with water, found at a depth of from eight to twelve feet from the surface, at the driest season of the year. The rise of water in wells after being drawn, is usually about two feet, in 12 hours; and except in a few wells which are much worked, the water contains a considerable portion of saline matter, and in some is almost brackish.

Barracks. The barrack occupied by the European Artillery, is a commodious house, formerly the residence of the commandant, it consists of several large airy rooms; and is situated on the most elevated ground, within the fort, in an enclosed compound of considerable size, surrounded by a mud wall about five feet high. It is open on all sides, particularly towards the east, and is at such a distance from the neighbouring villages, as to prevent inconvenience from noise &c. Near the barrack compound, and only separated from it by a narrow road, are the houses of the European officers, forming an oblong square on the southern face of the fort. They are large convenient buildings, and one of them contains a public bath room, which has been found to be not only a great luxury, but conducive to health.

The place of arms, for the native troops, is situated in the centre of the village, having an open space in front large enough to admit of a regiment being drawn up in line.

Hospital. The hospital stands within a few yards of the place of arms, separated from it by a road, it is a convenient build-

ing, though old and out of repair, forming three sides of a square, and is divided into five apartments, three of which are occupied by the European and native sick, and the surgery; it is surrounded by a wall about eight feet high, enclosing a considerable area in front, with only one small entrance easily guarded, so as completely to prevent unauthorized admission or exit. The situation though not unexceptionable, is perhaps as convenient as any that could be chosen within the fort, and it requires to have the walls somewhat raised, and the windows enlarged. It is contemplated by government to erect a new hospital at this station.

Native lines. The native lines are placed outside the fort, on a table of rock sufficiently elevated to prevent accumulations of stagnant water, or the generation of malarious effluvia. From the general topographical character of Palamcottah, and its immediate vicinity, as above described, there is every reason to believe, that it will continue to be as healthy, and free from disease, as hitherto.

Jail & hospital. As previously noticed, the jail and hospital of Tinnevelly, were removed to the Fort of Palamcottah, in the year 1838; the rampart adjoining the eastern gate, with a space enclosed by a mud wall, being appropriated for the jail, within a few yards of which is the hospital, also enclosed by a wall on the north and west sides. The lowness of the roof of both the jail and hospital, the insufficient ventilation, and the limited extent of accommodation, render them very objectionable for either purpose, and though much has been done of late to improve them, they are still in some degree liable to the objections mentioned.

The hospital consists of three apartments, the principal ward of which is raised about four feet and a half above the square, but the roof being on a level with the rampart, the apartment which is formed of solid blocks of granite, is only nine feet high; the two other wards are small, and on a level with the ground, they have tiled roofs, and are also imperfectly ventilated.

The diet, clothing, hours of labour, &c. are shown in the general table annexed to the report of this division.

As the medical returns from this jail were not forwarded till 1836, the usual table of disease cannot be given. The sickness and mortality however which have occurred amongst the convicted prisoners, since that period up to 1841 inclusive, are exhibited in the following table No. 9. The percentage of admissions into hospital on the strength, is exceedingly high, but the diseases have been of a mild nature, and the mortality is below that of most other jails in the division.

During the same period from an aggregate strength of 80 prisoners waiting for trial, 127 admissions into hospital have taken place, (including 40 cases of fever, 33 of bowel complaints and 12 of rheumatism) and 5 deaths, viz. one from diarrhœa, one from dysentery, one from asthma, one from beriberi and one from compound fracture of the leg.

A Native regiment has been stationed here during the period from 1829 to 1838, and table No. 10, shews the nature of the diseases and amount of mortality which have occurred during that time, from an aggregate strength of 8094 sepoys. A small detachment of Artillery is also stationed at Palamcottah, but the number of Europeans has not exceeded 20 men; and in five years from 1834 to 1838, from an aggregate strength of 101 men, 206 admissions into hospital have taken place, (including 6 cases of fever, 14 of dysentery, 24 of hepatitis, 23 of ebrietas and 40 of venereal) and 7 deaths, one from fever, two from dysentery, one from hepatitis, two from ebrietas and one from erysipelas.

JAIL OF TINNEVELLY.

No. 9.—*Table exhibiting the number of Admissions and Deaths the Convicted Prisoners, from each class of Disease, from* 1836 *to* 18 *inclusive.*

CLASSES	DISEASES.	1836 to 1841. Aggregate strength 547. 1st Half. Ad.	Dd.	2nd Half. Ad.	Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	Dd.	2nd Half. Ad.	Dd.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick
Fevers......	Febris ephemera	89	0	144	0								
	,, intermit. quot	292	2	286	1	383	2	433	1	816	3	149 ·177	0 ·
	,, tertian.......	2	0	3	0								
	Cholera........	0	0	1	1	0	0	1	1	1	1	0 ·182	100 ·
Diseases of the Abdominal viscera......	Diarrhœa.... ..	19	0	22	2								
	Dysenteria acuta et chronica.	40	4	98	3	100	4	178	5	278	9	50 ·822	3 ·
	Obstipatio......	4	0	5	0								
	Dyspepsia.......	36	0	52	0								
	Hœmorrhois....	1	0	1	0								
	Hepatitis.......	0	0	0	0	0	0	0	0	0	0	0 ·000	0 ·
Diseases of the Lungs.	Catarrhus......	3	0	5	0	3	0	6	0	9	0	1 ·649	0 ·
	Asthma........	0	0	1	0								
Diseases of the Brain.	Epilepsia.	0	0	1	0	0	0	1	0	1	0	0 ·182	0 ·
EruptiveFevers......	Variola.........	0	0	1	0								
	Varicella.	2	0	0	0	4	0	5	0	9	0	1 ·649	0 ·
	Rubeola.........	2	0	4	0								
Dropsies....	Anasarca.......	1	0	0	1	1	0	0	1	1	1	0 ·182	100 ·
Rheumatic affections ..	Rheumat. acutus et chronicus.	55	1	70	2	55	1	70	2	125	3	22 ·851	2 ·
Venereal affections ..	Syphilis primitiva..........	1	0	1	0								
	Gonorrhœa.....	1	0	3	0	2	0	6	0	8	0	1 ·462	0 ·
	Hernia humoralis.............	0	0	2	0								
Specific diseases.....	Lepra.........	0	0	0	0								
	Dracunculus. ..	0	0	0	0	3	0	2	1	5	1	0 ·914	20 ·
	Atrophia........	3	0	2	1								
Diseases of the eye...	Morbi Oculorum..........	4	0	6	0	4	0	6	0	10	0	1 ·828	0
Diseases of the skin.	Morbi Cutis.....	10	0	12	0	10	0	12	0	22	0	4 ·021	0
	Other Complaints.	160	0	148	0	160	0	148	0	308	0	56 ·343	0
	Total......	725	7	868	11	725	7	868	11	1593	18	291 ·407	1

o. 10.—*Table exhibiting the admissions into hospital and deaths ongst the Native troops stationed at Palamcottah from* 1829 *to* 1838 *inclusive.*

LASSES	DISEASES.	From 1829 to 1838. Aggregate strength 8094. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions & deaths from each class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total Deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
ers......	Febris ephemera	240	0	311	0	490	5	557	8	1047	13	12·935	1·241
	,, intermit quot.	211	4	210	7								
	,, remittens......	3	0	0	0								
	,, com cont....	36	1	36	1								
	Cholera........	16	9	62	28	16	9	62	28	78	37	0·963	47·436
eases of e Abdo-inal vis-ra......	Diarrhœa......	14	4	26	1	110	10	146	3	256	13	3·162	5·078
	Dysenteria acuta et chronica.	31	5	42	2								
	Obstipatio......	13	0	12	0								
	Dyspepsia......	45	0	64	0								
	Hœmorrhois. ..	7	1	2	0								
	Hepatitis	2	0	5	1	2	0	5	1	7	1	0·086	14·285
eases of e Lungs.	Catarrhus......	7	0	16	1	21	2	21	5	42	7	0·519	16·666
	Asthma.........	2	1	1	0								
	Phthisis pulmonalis.........	1	0	1	1								
	Pneumonia	7	1	3	3								
	Dyspnœa..... ..	4	0	0	0								
eases of e Brain.	Apoplexia......	1	0	0	0	10	2	11	3	21	5	0·259	23·809
	Epilepsia..	1	1	0	0								
	Paralysis.... ..	3	1	4	1								
	Amentia........	2	0	1	0								
	Mania..........	3	0	4	0								
	Hydrophobia...	0	0	*2	2								
ptive fe-ers.......	Variola..	3	0	2	0	20	0	14	0	34	0	0·420	0·000
	Varicella.......	16	0	10	0								
	Rubeola........	1	0	2	0								
psics....	Anasarca..	4	3	3	0	6	4	4	0	10	4	0·123	40·000
	Ascites.........	2	1	1	0								
umatic fections.	Rheumat. acutus et chronicus.	146	1	160	0	146	1	160	0	306	1	3·780	0·326
ereal af-ctions ..	Syphilis primitiva..........	46	0	54	0	72	0	81	0	153	0	1·890	0·000
	,, consecutiva..	1	0	3	0								
	Gonorrhœa.....	15	0	12	0								
	Hernia humoralis............	7	0	10	0								
	Strictura urethrae..........	3	0	2	0								
cific dis-ses	Dracunculus....	9	0	1	0	28	2	20	6	48	8	0·593	16·666
	Atrophia.......	12	1	13	6								
	Scorbutus......	0	0	1	0								
	Scrophula......	7	1	5	0								
eases of ie eye....	Morbi Oculorum..........	40	0	61	0	40	0	61	0	101	0	1·247	0·000
skin..	Morbi Cutis....	94	0	71	0	94	0	71	0	165	0	2.038	0·000
	Other diseases..	597	1	586	3	597	1	586	3	+1183	4	14·615	0·338
	Total...	1652	36	1799	57	1652	36	1799	57	3451	93	42·636	2·694

* Bitten by the same dog, the disease appeared in both cases, after the lapse of three months.

+ Including 350 admissions from ulcus simplex
and 540 Do Do Furunculus.

DISTRICT OF MADURA.

Madura its situation and boundaries.

The district of Madura, situated between the 9th and the 11th degrees of N. latitude, and 77th and 79th of E. longitude, is bounded on the south, by Tinnevelly and the Gulph of Manaar; on the west, by Travancore; on the north, by Coimbatore and Trichinopoly; and on the east, by Tanjore and Palk straits; the line of sea coast is about 100 miles in extent. It is divided into the talooks of Teroomangalum, Madacoolum and Maloor, forming the Government portion of the district; the remainder comprises the Zemindaries of Ramnad, and Shevagunga.

The three Government talooks contain 521,357 cawnies of land, of which 335,277 are unproductive or waste, with 446 villages, having a population of 157,000 souls.

Chief towns.

The chief towns are Madura, Dindigul and Ramnad, but from the shallowness of the coast it has no sea port towns of any importance.

Rivers.

The principal river is the Vighey or Vaygharoo, which rises in the western ghauts, and flowing in a south easterly direction, empties itself into the sea by several channels, the principal of which is north of the Paumbum pass.

Mountains.

The western mountains, dividing the district from Travancore, run in a south easterly direction, and a chain of hills, taking a N. E. course, divide the Polliums from the Dindigul valley, and extend for more than 20 miles, as far as Cotamputty, on the road from Madura to Trichinopoly.

Climate.

These hills are feverish during the months of February, March, April, and sometimes even in May—on some of the lower hills also, as the Nuttom and Coracoody ranges, running east and west, as well as near the banks of

rivers, and other low parts of the country, fevers prevail during the above mentioned period, and also in the rains, when the days are sultry, and the nights chilly.

In the talook of Maloor, when the rains fail, on which the ryots depend for the irrigation of their lands much distress has occasionally been experienced, and it has likewise been observed, that the inhabitants are more subject to attacks of dysentery, and guinea worm, when the tanks become nearly dried up. Cholera has generally prevailed to a considerable extent in this district; and native practitioners are so few in number, and so exceedingly ignorant of medicine and surgery to which little attention is paid, that it has been found necessary to place some native doctors on the peon establishment, in order to afford assistance in urgent cases, and to procure information in those of a criminal nature.

Vegetable produce. The following grains &c., are the produce of the district; paddy, raghee, cumboo, cholum, varaghoo, tany, samay, cootherayvalle, candacunnei, mochaycottay, country beans, thattapiar, pacepiar, panepiar, green gram, chalpair, vooloonthoo, horse gram, sessamun seeds, bengal gram and doll, castor seeds, landom seeds, voopoo cotton seed &c.

The S. W. monsoon, which sets in about the latter end of April, and lasts till July, is favorable for the cultivation of dry grain or punjy; and from August to November, the season is also favorable both for the cultivation of paddy, and punjy.

Roads The roads generally through the district, are good, and level, having trees planted along their sides; there are also mile stones, on the principal roads, having English and Malabar inscriptions; and wherever required, well built bridges have been constructed.

Food. The food of the poorer class of natives consists of paddy, raghee, cumboo and cholum; they are generally

employed in agricultural labour, and as coolies in cutting firewood &c.

The Paliars and Valiars with other poor tribes living on the hills, subsist chiefly on the jungle potato, and on dry grain the produce of small arable spots, which they cultivate.

Disease of Cattle. The natives state that bullocks are liable to an eruptive disease, accompanied with looseness of the bowels, caused by eating young grass which springs up at the commencement of the monsoon; they also assert that bullocks die suddenly, from eating a certain poisonous grass. Sheep are subject to the rot, but not to any great extent.

Town of Madura. The town of Madura, the capital of the district, is situated in north latitude 90° 50″, and in east longitude 78° 12″, being 87 miles south west of Trichinopoly. It is enclosed by a wall, at present in a ruinous condition, from 18 to 24 feet in height, and by a deep ditch; and contains a population of about 30,000 souls. The area on which the town is built is about three miles in circumference, a space much too limited for so large population.

Dwellings. The houses are in most instances built of mud, and towards the north side of the town are large and comfortable, but the buildings to the south are of an inferior description, crowded together, and intersected by narrow filthy lanes.

Streets. The principal streets are large and spacious, and numerous brick houses have been erected of late years.

Drains. On either side of the streets, deep channels are cut for conveying off water, all of which communicate with drains leading into the ditch; but from the little attention that has been paid to the cleansing of them, they have hitherto but very imperfectly performed the office for which they are intended.

Want of cleanliness. Considerable improvement has lately been effected, as regards the cleanliness of the town, but there remains still much to be done, owing to the inhabitants having long been permitted to make the space in front of their houses the public necessary, and the depository of all sorts of rubbish.

Dung hills are formed at the corners of the different streets, and four carts are allowed by government, for the removal of the daily accumulations, a number which is either too few, or the scavengers perform their duty with extreme carelessness, as they make but little impression on the daily collections of filth and rubbish, which still meet the eye in every quarter.

Fuel, Water. The fuel used in the fort is brought from a distance of ten miles, and is consequently expensive; and the water used by the Europeans at the station, is brought from the Secundra hills, three miles distant.

Bazar. The bazar is large, and well filled with every thing required for native consumption.

Weavers. The staple manufacture of the place is cloth, and weavers form by far the most numerous body of the inhabitants; they are a peaceable and industrious class of men, but penurious in their habits, using a very small portion of animal food, and always the inferior sorts of grain; their houses are built with little regard to comfort, the interior court-yard attached to them, is usually wet and miry, no drains being made to carry off the water, which from their occupation, they use in great quantities.

Mahomedans. Mahomedans form but a small section of the population of Madura, not exceeding 1,500, they are chiefly of the lubbay caste, and are engaged in various trades.

Labouring class. The condition of the labouring classes appears to be good; and the difficulty occasionally experienced in procuring workmen, is a sufficient proof that they are in general fully employed.

Mendicants. Beggars are rather numerous, being chiefly persons unable from age, sickness, or loss of sight, to earn a livelihood.

Sepoys habitatious. The sepoys have no lines, but live chiefly in the south west corner of the town, indiscriminately with the inhabitants; this situation is open, well ventilated, and the sepoys keep their houses, and the streets in the neighbourhood, clean, and free from accumulations of rubbish.

Hospital. The sick of the detachment are accommodated in a building in the Fort, formerly part of an old pagoda which is built entirely of granite; it is therefore thoroughly dry, and is well ventilated. For table of diseases see appendix under the head Madura.

Jail, civil Hospital. The jail and civil hospital, within the same compound, and the offices connected with them, stand upon an elevated piece of ground in the Fort, the remains of a native palace; the whole being enclosed by a wall 15 feet in height. The buildings are substantial, having tiled roofs, but the circulation of air is somewhat impeded by the surrounding wall, and they are moreover liable to the objection, that in the event of epidemic disease breaking out, the communication between the sick in hospital, and the convicts cannot be cut off; and it may further be added, that a crowded Fort like that of Madura, is but an ill suited locality for a jail, which should if possible, stand in an airy situation, apart from buildings of every other description.

See table at the end of the report for diet, clothing, labour &c.

The following tables shew the nature and amount of disease and mortality which have occurred amongst the inmates of the jails during the ten years from 1829 to 1838 inclusive; they exhibit the diseases classified and point out the percentage of sick to strength, and of deaths to sick treated.

JAIL OF MADURA.

No. 11—*Table exhibiting the Number of Admissions and Deaths of the Convicted Prisoners, from each class of Disease, for 10 years.*

CLASSES	DISEASES.	From 1829 to 1838. Aggregate strength 3119. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class.	Total Deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers......	Febris ephemera	239	0	162	1	381	7	297	9	678	16	21 ·737	2 ·359
	,, intermit.......	130	2	113	1								
	,, tertian........	0	0	2	0								
	,, remittens....	0	0	1	0								
	,, continua.....	12	5	19	7								
	Cholera.........	34	21	45	25	34	21	45	25	79	46	2 ·532	58 ·227
Diseases of the Abdominal viscera......	Diarrhœa..	151	25	189	40	187	34	258	47	445	81	14 ·267	18 ·202
	Dysenteria acuta et chronica.	35	9	67	7								
	Obstipatio......	1	0	2	0								
	Hepatitis.......	0	0	0	0	0	0	0	0	0	0	0 ·000	0 ·000
Diseases of the Lungs	Catarrhus......	6	1	25	1	9	3	30	4	39	7	1 ·250	17 ·948
	Asthma.........	1	1	2	0								
	Phthisis pulmon	1	1	2	2								
	Hœmoptysis ...	1	0	1	1								
Do. Brain..	Apoplexia......	0	0	3	1	9	2	4	1	13	3	0 ·416	23 ·076
	Epilepsia..	6	2	1	0								
	Paralysis.	1	0	0	0								
	Amentia........	1	0	0	0								
	Mania..	1	0	0	0								
Eruptive fevers......	Variola	11	1	2	1	52	1	82	1	134	2	4 ·296	1 ·492
	Varicella........	40	0	63	0								
	Rubeola........	1	0	16	0								
	Erysipelas.......	0	0	1	0								
Dropsies...	Anasarca.... ..	14	9	12	2	15	10	12	2	27	12	0 ·865	44 ·444
	Ascites...... ..	1	1	0	0								
Rheumatic affections.	Rheumat. acut. et chronicus..	66	3	47	2	66	3	47	2	113	5	3 ·622	4 ·424
Venereal affections..	Syphilis Primitiva..........	1	0	3	1	7	0	10	1	17	1	0 ·545	5 ·882
	Gonorrhœa	3	0	2	0								
	Hernia humoralis..........	3	0	4	0								
	Strictura urethrae..........	0	0	1	0								
Specific diseases.....	Atrophia.., ...	3	1	1	1	31	2	12	1	43	3	1 ·378	6 ·976
	Dracunculus ...	27	0	11	0								
	Scrophula......	1	1	0	0								
Diseases of the eye ..	Morbi Oculorum..........	10	0	17	0	10	0	17	0	27	0	0 ·865	0 ·000
Do. skin..	Cutis..	46	0	36	0	46	0	36	0	82	0	2 ·629	0 ·000
	Other diseases .	917	3	832	6	917	3	832	6	1749	9	56 ·075	0 ·514
	Total....	1764	86	1682	99	1764	86	1682	99	3446	185	110 ·484	5 ·638

JAIL OF MADURA.

No. 12.—*Table exhibiting the Number of Admissions and Deaths of the Prisoners under trial, from each class of Disease for 10 years.*

CLASSES	DISEASES.	From 1829 to 1838. Aggregate strength 600. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths by each class of disease. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average annual per centage of sick to strength.	Average annual per centage of deaths to sick.
Fevers......	Febris ephemera	5	0	10	0	10	0	25	0	35	0	5 ·833	0 ·000
	,, intermit. quot	3	0	15	0								
	,, tertiana'.....	0	0	0	0								
	,, remittens....	2	0	0	0								
	,, continua.....	0	0	0	0								
	Cholera........	8	4	5	3	0	4	5	3	13	7	2 ·166	53 ·846
Diseases of the Abdominal viscera.	Diarrhœa.......	16	4	32	5	19	4	38	6	57	10	9 ·500	17 ·543
	Dysenteria acuta et chronica.	3	0	6	1								
	Hepatitis........	0	0	0	0	0	0	0	0	0	0	0 ·000	0 ·000
Diseases of the Lungs.	Catarrhus.......	1	1	0	0	1	1	0	0	1	1	0 ·166	100 ·000
	Asthma........	0	0	0	0								
Diseases of the Brain.	Apoplexia......	1	1	0	0	3	1	1	1	4	2	0 ·666	50 ·000
	Epilepsia	1	0	0	0								
	Mania..........	1	0	1	1								
Eruptive Fevers......	Variola.........	3	1	1	1	4	1	9	1	13	2	2 ·166	15 ·384
	Varicella	1	0	8	0								
Dropsies. ..	Anasarca.......	1	1	1	1	1	1	1	1	2	2	0 ·333	100 ·000
	Ascites	0	0	0	0								
Venereal affections ..	Syphilis primitiva..........	0	0	1	0	0	0	1	0	1	0	0 ·166	0 ·000
Rheumatic affections.	Rheumat. acutus et chronicus..	3	0	1	0	3	0	1	0	4	0	0 ·666	0 ·000
Specific diseases.	Atrophia........	0	0	1	0	0	0	0	0	1	0	0 ·166	0 ·000
Diseases of the eye.	Morbi Oculorum.........	0	0	0	0	0	0	0	0	0	0	0 ·000	0 ·000
Diseases of the skin.	Morbi cutis.. ..	4	0	3	0	4	0	3	0	7	0	1 ·166	0 ·000
	Other diseases..	15	0	27	1	15	0	27	1	42	1	7 ·000	2 ·380
	Total....	68	12	112	13	68	12	112	13	180	25	30 ·000	13 ·888

Remarks on the preceding tables.

The average annual numerical strength of the convicts during the ten years, has been 312, and the admissions into hospital 344, or 110 per cent; the number of deaths annually during the same period has averaged 18, or 5·931 per cent on the strength, the total number of admissions being 3446, of deaths 185, and the aggregate strength 3119.

The sickness and mortality were not increased in this jail in 1833 and 1834, as in those already described; but in 1837, the mortality was nearly doubled from cholera and diarrhœa.

The most numerous admissions have been from *fever, bowel complaints,* particularly *diarrhœa, eruptive fevers* and *rheumatism,* and the greatest mortality has been produced by *bowel complaints, cholera, fever* and *anasarca,* as the following table will shew.

Table No. 13.

	1829.		1830.		1831.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		Total.	
	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Fever......	26	1	33	2	63	2	49	1	124	0	69	1	50	1	59	1	76	3	123	4	678	16
Cholera....	6	3	1	1	0	0	21	14	17	10	2	2	0	0	1	0	29	15	2	1	79	46
Diarrhœa...	35	10	37	5	46	8	30	6	28	5	36	8	30	7	39	4	40	10	19	2	340	65
Dysentery..	6	0	1	0	9	4	7	0	4	3	0	0	7	2	0	0	28	2	40	5	102	16
Anasarca...	1	1	3	3	3	2	2	1	0	0	5	2	7	1	3	0	1	1	1	1	26	12
Total admissions & dths	74	15	75	11	121	16	109	22	173	18	112	13	100	11	102	5	174	31	185	13	1225	155
Strength..	224		246		356		343		325		424		380		280		302		218			

Thus more than 5-6ths of all the mortality has been occasioned by these five diseases alone, or 155, out of 185.

Of these diseases however diarrhœa is the most important, and it is observed by the medical officers who have been in charge of this Jail, that it has prevailed more or less, in this fatal form, ever since the prison was first occupied; and moreover the records of the hospital also shew, that in most of the severe cases of fever, and in almost all the fatal cases of this and other diseases, diarrhœa in the latter stages became a promi-

nent symptom, and was evidently the cause of death, in the majority of the fatal cases.

The following extracts from the medical officers' reports will illustrate more clearly the nature of this affection.

"This disease (diarrhœa) called for great attention, because medicine was found to have little or no power in controlling it; in almost every case it had existed for three or four weeks previous to admission into hospital, with frequent purging, though without pain, loss of appetite, and progressive emaciation. Under the use of medicine the evacuations were often reduced to three or four in number during the 24 hours, but they still continued of a whitish yeasty appearance, and copious, and on an increase of the purging occurring the patient rapidly sunk. On examination, ulceration of the mucous coat of the large intestine was invariably found."

"This disease was attributed to the confined state of the dormitories or cells. In the early part of the year all the prisoners whose appearance indicated unusual weakness were relieved from all work, but permitted to take sufficient exercise in the open air, and a light nutritious diet was given, with a view of checking the complaint, but without success."—*Dated* 30*th June* 1829.

"Causes of diarrhœa. The Jail being situated in the centre of the town was of course influenced by the same causes which were at that time so generally affecting the inhabitants of Madura, but at the same time it is equally true, that the crowded state of the prison operated throughout most injuriously upon the health of its inmates; the cells are only calculated to contain about 250 persons, but the actual number in confinement was 360. The dormitories are as well ventilated as it is possible for them to be, with sufficient regard to the security of the prisoners, and they are kept scrupulously clean; but from their crowded state, the heat of the apartments soon becomes excessive, and the stench, one or two hours after the prisoners have been locked up, very offensive."—*Dated* 30*th Dec.* 1837.

The table of diseases, amongst the detachment of native troops at this station, given in the appendix under the head Madura, affords a stricking contrast in the amount of sickness and mortality as compared with the inmates of the jail. The total admissions into hospital from the detachment, during the same ten years, have been 639 with 20 deaths, from an aggregate strength of 1542 men. The prisoners are probably equally well fed with the sepoys, they are also obliged to be cleanly in their habits, and are not overworked ; in one essential point however they are placed in very different circumstances, viz. sleeping in crowded apartments and breathing during the night a vitiated atmosphere.

During the year 1837 above adverted to, 97 admissions into hospital took place from the detachment of sepoys, 215 in number, and one death from cholera occurred ; in the same year, from an aggregate strength of 373 prisoners, including those waiting for trial, 450 were received into hospital, of whom 38 died, viz. sixteen from cholera, fourteen from bowel complaints, and the remaining eight from fever, anasarca and other diseases.

In 1836, the town and surrounding country, which had been perfectly healthy, experienced a severe visitation of Cholera, which broke out three days after the 9th Regiment N. I., suffering from that disease, had passed under its walls ; on the 3d July a case of cholera occurred in a lubbay, and the disease soon spread over the southern portion of the town ; it found in Madura, from the causes before mentioned, a locality containing all the usually admitted predisposing causes of disease ; and upwards of 1,500 of the inhabitants fell victims to it. It will be observed from Table No. 13, that this epidemic did not spread to the prisoners in the jail.

The regiment, having passed through villages in which the disease was prevailing, was attacked at Mellore, within 30 miles of Madura ; from that town to Palamcottah, whither it was proceeding, its line of march could be distinctly traced, by the ravages the epidemic made in every village, in the vicinity of the encamping grounds.

Pills composed as follows, were made up in considerable quantities, by the medical officer at Madura, for general distribution to the inhabitants suffering from cholera, and were, in his opinion, often followed with good effect.

℞ Pulvis Lyttæ....	....	......	....	grains	2
Opii	.....	.....	....	grains	¼
Acet : Plumbi	.....	.....	....	grains	3
Camphoræ	.....	.....	.....	grains	1

One pill was given every hour, till 6 or 7 were retained, using other means at the same time for restoring the balance of the circulation, such as artificial heat, frictions, &c.

DINDIGUL.

Situation and extent. The district of Dindigul is situated between 10° and 11° N. latitude, and 77° and 79° E. longitude, its extreme length from north to south being eighty, and its greatest breadth from E. to W. seventy miles, the whole comprising a superficial area of 4,500 miles, of which 200 are hills and wood, the remainder being a fertile champaigne country.

Boundaries. It is bounded on the north by Coimbatore, on the south by Madura and Tinnevelly, on the east by Trichinopoly, and on the west it is separated from Travancore by a high range, called the Pulney hills.

Talooks. It is divided into four talooks viz. Nellahcottah, Toddy Coomboo, Jampillay and Marungapoory.

Rivers. Its principal rivers are the Kodaven, the Mangerry, the Vagachay, the Kul and the Eiloor.

The Kodaven, is a stream of considerable magnitude, which in the rainy season is very deep and rapid ; it rises in the western chain of hills, and running north-easterly falls into the Cauvery, there are numerous villages on its banks with considerable tracts of rice ground, which afford two crops annually.

The Mangerry or Manga Nuddee, rises in the Nellahcottah district, to the northward of the source of the Kodaven, and running also in the same direction, falls into that river in the Toddy Coomboo talook.

The Vagachay, rises also in the same range of hills, and running easterly, and north-east, crosses the Madura

and Nutham roads, it then divides into the Punganey and Mulipaddy rivers, which intersect the plain of Dindigul, and being joined by the Kul and Eiloor, two small streams which rise in the low hills to the eastward, they again unite, and running north, fall into the Kodaven.

Tanks wells &c. Besides rivers, there are in the district, 3517 tanks, and 10,577 wells, but for agricultural purposes the inhabitants depend chiefly on the rains, which in general during six months of the year, are abundant, and two crops of dry grain are not unfrequently obtained annually.

Both rivers and tanks contain excellent fish, which is plentiful in the market at Dindigul ; the best kinds are large manil or sand-fish, besides which eels, prawns, and various descriptions of small fish are procurable. In the Nellahcottah district, in a well belonging to a person named Mootoo Moodiar, a large species of cockle or muscle is found, as large as a moderate sized oyster, having a dark brown circled shell, with a bright pearly inside, it is considered wholesome as food, and it likewise is said to produce pearls. The ponds and tanks become dried up during the hot season, but the wells contain water throughout the year.

Mountains, hills &c. The chief mountains are the Pulneys, lying about 20 miles west of the town of Dindigul, and separating the district from that of Malabar. They are chiefly composed of gneiss,and rise to the height of 7,000 feet above the level of the sea ; the climate of these hills, is said to be equal to that of the Neilgherries, and they are said to surpass themin the beauty of the scenery.

The Serroo Mullays, about five miles south of the town of Dindigul, rise to the height of 3,500 feet, or thereabouts, and extend from north to south 27 miles, and from east to west 20—they also consist of gneiss with veins of felspar, and a greenish micaceous schist, which is easily split into transparent layers ; the soil, is either the light red sandy earth, so prevalent throughout the whole district, rarely found to be

more than three feet in depth, or a rich black vegetable mould, formed from decayed roots and leaves. These hills are undulating and peaked, and intersected by rivulets ; they have no table land of any extent, and large tracts of them are covered with wood, amongst which are some fine forest trees.

The ascent on the Dindigul side is very steep, but the road is winding, and there are few parts that might not be ridden over, upon a strong pony.

On visiting these hills in the month of October, the thermometer in tents, stood at 62° at sun-rise, and 72° at noon, the weather being cloudy, with occasional showers ; the air, at all times, was found to be delightfully fresh and bracing, giving a feeling of elasticity and enjoyment.

If bungalows were erected on the hills, they would form a desirable residence for invalids from Dindigul and Trichinopoly, and excellent gardens might be made on them, at a trifling expense ; from the former place, all the necessaries of life are daily procurable. The inhabitants of the few small villages on these hills, appear to be very poor, and subsist principally by cultivating plantains, they also grow oranges, citrons, jack fruit and pine apples ; and they have a small stock of poultry, horned-cattle and goats. They are not so robust as the people of the plains, but are not known to be subject to any particular complaints, the most prevalent disease is fever.

Climate. The climate of Dindigul is perhaps equal to that of any part of the Carnatic. In May, which is the hottest month of the year, the thermometer ranges from 79° to 98° ; and in December and January, the coldest months, it ranges from 66° to 80° ; and at this season the climate is peculiarly favorable to the growth of European vegetables. In July the thermometer ranges from 80° to 90° ; in August from 76° to 88°, September and October, giving nearly a similar result, the

weather being hotter or colder according to the quantity of rain. The rains generally commence in July, and continue at intervals until February; the nights are always cool, and the climate though unfavourable to persons afflicted with asthmatic complaints, or other pulmonary affections, is considered in general salubrious.

Soil.

The soils are chiefly red, silicious, and argillaceous earths, of from three to four feet in depth, though frequently less, lying upon gneiss rock; the following are the several varieties found throughout the district. 1st, *cashel* or black soil, a mixture of clay and sand, which is exceedingly fertile, and well suited for the growth of paddy, raggy, cholum, and cotton; 2d, *puddagay*, a mixture of black and red earth, which yields two, and often three crops in the year; 3d, *shevel* or deep red loam, well adapted for the culture of various sorts of dry grain, and favorable to the growth of leguminous plants, and many species of pulse; 4th, *manil* or sand, which is much esteemed for cultivating cumboo, rape seed and horse gram; 5th, *sharalay* or light red stony earth, which produces castor oil, and a few species of pulse; 6th, *shokum*, white argillaceous earth, strongly impregnated with lime, in this soil cotton, oil nuts and rape seed, are successfully cultivated; 7th, *kuller*, black argillaceous earth, in which cotton grows best; 8th, *veppel*, saline earth, from which the inhabitants extract an impure muriate of soda; 9th, *orer munnoo*, a description of fuller's earth, used in bleaching and washing, which contains impure carbonate of soda; 10th, *chunam kuller*, or common lime stone, which is found in many parts; 11th, a mixture of kuller and veppel, producing a white chalk found only in small quantities at certain depths. From the general sandy or feruginous nature of the soil, noxious exhalations are rare, and confined to particular localities.

Vegetable productions.

The principal productions are paddy, cholum, raggy, tobacco, cotton, betel nut, Bengal and common gram, rape seed, oil nut, and sugar canes; bamboos, and a light sort of timber used in the construction of houses, are procured from the neighbouring hills; oranges

citrons, guavas, mangoes, jack and other fruits are grown every where, and potatoes, beans, peas, knolcole, cucumbers, cabbage, carrots and turnips are cultivated, in some instances, from seed procured from the Neilgherries or Bangalore; many medicinal plants are also produced in the district, amongst which are cheyreta, castor oil, croton, sarsaparilla*, and senna, the last being equal to that in general use in the hospitals of of this presidency, which is brought from Egypt.

Animals. Sheep and goats abound, black cattle are also reared, but are less valuable than those of Diaporam and Coimbatore, elephants are found in the Pulney mountains, cheetas occasionally visit the plains, and wild hogs, foxes, jackals, and jungle cats, with a variety of monkeys are common; elk and bison are found both on the Pulney and Sorroomullay hills; florican, snipe, pigeons of varieties, and water-fowl may be purchased at Dindigul from the shikarees, at a very reasonable rate.

The principal mineral productions are iron, in a state of oxide, talc and lime.

Wet grain is cultivated near tanks and rivers; but the chief produce is dry grain; the ground after being manured is ploughed by bullocks, and the seed being once deposited, the ryots trust to the rains and dews for the nourishment of the plant, and are seldom disappointed. The famine which occurred in the year 1833, fell very lightly upon the people of Dindigul.

Roads. The roads throughout the district are sufficiently good to afford easy communication by means of bullock bandies, the best roads are those to Trichinopoly and Nutham; there is a daily tappaul or post to Trichinopoly and Madura, and in the dry season it reaches Madras in four days.

Population. The number of inhabitants at present in the four talooks, is 217,060, and of villages and hamlets 2246, which are pretty equally dispersed over the district.

* Indian sarsaparilla or Periploca Indica, Lin:

Dwellings. The houses are built of mud, the rafters being of bamboo, they are either tiled or thatched, and in the better villages white washed; compared with native houses in general, they are of a superior description; the poorer sort of people lie on the ground, but are well provided with cumblies, and the more opulent, including sepoys and pensioners, sleep on cots or char-paes.

Habits. The usual hour of rising, is from four to six A. M. and of retiring to rest, from eight to ten P. M. Two meals a day are usually eaten, one at 10 A. M., and one at 5 or 6 P. M., but many also take an early morning meal; the cold bath is in very general and daily use.

Diet, &c. The higher caste hindoos who are very numerous, live altogether upon vegetable food of various kinds, with milk and condiments, such as pepper, chillies and pickles. The musselmans, and lower grades of hindoos eat poultry, fish and eggs, although rice constitutes their principal article of diet; at Dindigul a considerable quantity of mutton is daily consumed, and beef is procurable occasionally, but a large proportion of the labouring people subsist upon raggy, dal-chinnee and cholum, made into a paste with buttermilk. Tobacco is used by all classes, and the consumption of arrack is likewise considerable; the spirit is procured by the distillation of jaggery, along with the bark of various trees, the most common of which is that of the vellalum and kurroovalum, or black and white indian gum arabic trees. Good water is every where abundant, but it has been observed in the hot season, when the wells and tanks are very low, that amongst the sepoys and natives of the town, who prefer rain water, guinea worm is of very frequent occurrence.

Manufactures. Some silks and muslins are manufactured in the town of Dindigul, and excellent black and white cumblies are made by the women, from the Carumber wool, which is abundant; coarse cotton cloths and handkerchiefs, are also made in several villages. At Gootum and Kullumpetty, iron was formerly manufactured upon an extensive scale, but the establish-

ments at which the ore was smelted, are gone to decay, and it is now only produced in a limited quantity in some villages, from feruginous earth. Paper is also manufactured, and implements of husbandry, and utensils for household purposes are made in every village, which possesses its own carpenters, brazicrs, silver smiths and iron workers, though the bulk of the population are cultivators. The chief articles of import, are sugar, salt and spices; and of export, cotton, wool, ghee, paddy and grain of different kinds, iron, wax, honey, betel nuts, tamarinds, gingilie and castor oil, arrack, tabacco, paper, muslins and silks.

Police. The Government police of the district, consists of a thasildar and eighty peons to each division, with a head man to every village, each having its own peculiar internal regulations. Thc bazaars and larger villages are kept clean by men who receive rice or some other payment, from the dookundars or shop-keepers, and the residences of private families, are kcpt in order by their own servants; no privies are attached to the houses.

The labouring poor are employed chiefly in out door work, the wages of a man being three annas per day, and of a woman one anna, and from the cheapness of clothing and food, there are few places where the poor are better off.

From the records of the police it would appear, that crime is of less frequent occurrence in this district, than in any part of the surrounding country, and the people are for the most part, a moral and well conducted race.

Schools. Schools are established in every respectable village, where the children of such as can afford to pay a small fee to the teacher, are instructed in reading and writing tamil, in arithmetic, and in religion; they are generally sent to school at the age of 5 years.

Endemic diseases, Fever. Fever prevails amongst the troops, more or less, throughout the year, but not to any great extent, and appears to arise principally from exposure to the

night air when on guard, as the wives and children of the men are more rarely attacked; amongst the inhabitants, fever is most prevalent in the hot weather. The most usual type of the disease is the quotidian intermittent, the paroxysms usually recurring in the evening, attended with pains in the limbs, and heaviness of head, a perfect intermission taking place in the morning, when the pains subside, leaving a feeling of weakness and heaviness only. Rigors occasionally precede the hot state. Although this is the most common form of the disease, the paroxysms come on at such irregular intervals, and vary so much in the periods of remission and intermission, as to defy all attempts at classification. Cases of quotidian remittent are also met with, occurring daily in the morning, the paroxysms being preceded by rigors. Quinine, administered at an early period of the disease, rarely fails to effect a cure in a few days, given in doses of from two to three grains, the stomach and bowels having been previously cleared out by an emetic and purgative. Should the secretions from the bowels be of an unhealthy character, mercurial purgatives become requisite, though not to the exclusion of quinine, which should also be given during intermissions, to prevent the recurrence of the paroxysms. Quinine aided by the remedies mentioned seems to exert a powerful influence in correcting diseased secretions, the tongue becoming cleaner, thirst diminishing, and the alvine evacuations improving under its use, but purgatives should in all cases be occasionally administered for the removal of morbid accumulations.

Guinea Worm. Guinea worm, which is common during the hot weather, is treated by the application of a poultice over the inflamed part, and should much surrounding inflammation exist, leeches become necessary; when the head of the worm protrudes, it is secured to a thick straw, round which it is rolled daily, and in this manner gradually extracted.

Ulcers. Ulcers of the legs and feet prevail during wet weather, both amongst the sepoys and villagers, and are chiefly

occasioned by want of cleanliness and poor diet, as the higher classes are exempt from them. The best application is basilicon and turpentine applied warm to the sores, and in bad cases, the administration of bark and wine is found to be very serviceable.

Ophthalmia. Ophthalmia occurs annually as an epidemic during the months of July and August, especially amongst children, the conjunctiva becoming highly inflamed, with tumefaction of the eye lids, followed by a purulent discharge; the cause of this disease is not very evident, but it is generally attributed to the effects of the hot winds; the best application is lunar caustic in solution.

Small Pox. Small pox also used to appear annually as an epidemic in the autumn, but since vaccination has been so widely diffused, the cases of it are comparatively rare.

Venereal. Venereal disease is not found to prevail to any considerable extent in this district.

Management of Infants. The day after the birth of a child, a dose of castor oil is given to it, and in the generality of instances, repeated daily for the first two or three months, and the child is washed every third day; after the first month it is usual to give it a few drops of the juice of the euphorbium, with boiled milk, as a preventive of sickness; should the mother have abundance of milk no other food is given for nine or ten months, after which the child is fed on rice, congee or sago.

No statements, either of diseases or deaths, are kept by the natives, and when especially called for by the authorities on particular occasions, they are made out from the information furnished by the heads of villages, collected from the reports of the native doctors, and but little dependance can be placed on these; no registers either of marriages or births have been kept, except in the district of Toddy Coomboo

A malignant epidemic fever raged, in the year 1810, in the southern provinces, occasioning great mortality, to such an extent indeed, that Dindigul was of necessity abandoned as a military station, and not re-occupied till the latter end of 1813. To investigate the cause of this fatal malady, a committee of medical officers, consisting of a president and two members*, was appointed in 1811, and the result of whose inquiries was submitted to government and afterwards published. About the middle of 1812, the ravages of the fever abated considerably, and shortly after disappeared altogether; in the year 1816, the fever again returned, and it would appear, with greater violence than before. The following table is extracted from the report of the committee, and shews the amount of the population, and mortality in the several districts.

	Population.	Deaths.	Per cent-tage of deaths.
Madura for 12 months.	245,654	24,626	10
Dindigul 12 Do.	298,654	21,510	$7\frac{1}{4}$
Coimbatore 16 Do.	298,606	22,451	$3\frac{3}{4}$
Tinnevelly 5 Do.	690,696	38,202	$5\frac{1}{2}$
Total....	1,833,610	106,789	$5\frac{3}{16}$

Since the above scourge, it does not appear that this district has been visited by any epidemic, the mortality in 1833 and 1834, was however great; nevertheless, it was found to have fallen far short of that which occurred in other parts of the country; this is attributable chiefly to the circumstance of the late dearth, at that period, having been comparatively but little felt.

* Superintending Surgeon W. Ainslie M. D. President.
Surgeon A. L. Smith...... } Members.
,, M. Christie M. D. }

In 1833, the aggregate population of the sub-collectorate of Dindigul was 268,000, in 1834, 263,840. In the first of these years, that in which the greatest distress prevailed, the proportion of deaths per cent, to population, was only 1$\frac{1}{16}$, and in the second not more than 1$\frac{1}{32}$. The most prevalent and fatal diseases have been cholera, fever, and small pox; in 1833, no less than 5,585 of the inhabitants were attacked by cholera, being about 2-7ths of the total number of sick treated, more than one half of whom died; in 1834, the number was only 2,518 or about $\frac{3}{25}$ of the whole sick, of whom rather less than one half died. In 1833, the febrile cases amounted to 4762, rather more than $\frac{1}{5}$ of which terminated fatally; in 1834, the number did not exceed 4,593, of which however, upwards of $\frac{1}{4}$ proved fatal; in 1833, the cases of small pox amounted to 3,230, upwards of $\frac{1}{3}$ of which proved fatal; in 1834, to 2,074, of which $\frac{1}{5}$ died. It is highly probable however, that the knowledge of diseases possessed by the native functionaries engaged in filling up the abstract from which these results are taken, must have been very limited, and that several mistakes have occurred in their classification, and that one disease was not unfrequently mistaken for another. In 1833, the total of sick was 18,874 and of deaths 4,747, being 25 $\frac{1}{7}$ per cent; in 1834, the total of sick was 18,414, the deaths 3,554, or 19 $\frac{1}{3}$ per cent.

There can be no doubt that the proportion of deaths to the total of sick, is rated too high, as it may be presumed there were not a few suffering from disease, who were not reported.

Annexed is a table shewing the number of inhabitants for 1833, 34, and 35, exclusive of the Shenkary division.

Hospital. The hospital at Dindigul is appropriated for the sick of the garrison and sub-collectorate, but the villagers sometimes apply for admission in severe cases, and a considerable number of them also receive medicines as out patients. The hospital is well situated in a good compound at a convenient distance from the lines, it is very airy and commodious, and capable of containing 50 beds, it has a surgery, cookroom,

quarters for an assistant apothecary, dead house, guard room and privy, all in good order.

The native hakeems are not without skill in the cure of some diseases, particularly the milder forms of leprosy; the most powerful of their remedies is arsenic, which is given in syphilis, fever, and some cutaneous diseases; calomel, jalap, bark, with a few other European medicines, are in request, and freely used by them, when they can be obtained. Dietetics form much of their curative plan, upon the supposition that all articles are either of a heating or cooling nature; they have several books upon medicine and surgery, the works of Aghastier being in most estimation, this person besides writing several books, is said to have performed miracles; there is a small choultry and a tank built in commemoration of him, below the S. W. face of the fortified rock of Dindigul.

Longevity. With regard to the longevity of the inhabitants, no correct information can be obtained, but many persons may be seen upwards of three score and ten; the natives of the hills however rarely attain to that age.

Town of Dindigul. The town of Dindigul, the capital of the district, is situated in the middle of an extensive plain, measuring 25 miles from north to south, and 30 miles from east to west, it is entirely surrounded by hills and mountains, and elevated 700 feet above the level of the ocean.

It is built on a gentle slope, its length from north to south, being 987 yards, and its breadth from east to west, 927 yards. In 1837 it contained 1833 houses, and 6,550 inhabitants, exclusive of the detachment of troops; the streets are wide, the houses well built, and the bazaars plentifully supplied with all the necessaries of life. The military lines are situated at the north-west corner of the town, on the highest part of the slope, they are well drained, and always dry and clean.

The cutcherry and collector's bungalow are situated about a quarter of a mile from the town, upon the highest part of the plain. The officers' bungalows lie between the town and

cuteherry, upon either side of the Trichinopoly road, plaeed in good eompounds enelosed with euphorbium or aloe hedges; the teak, tamarind and various trees and shrubs arc cultivated, and give an ornamental appearance to thc town, and to the eompounds in partieular. The soil is the light and dark ferruginous earth, already spoken of, lying upon gneiss, whieh in some plaees has deeayed into a light grey soft stone, easily dug by a piek-axe or spade; on the sides of wells some of whieh are deep, the soil appears, for the most part, to be about three feet in thiekness, and the roek is veined with felspar, and sometimes with a soft stratum of clay. The water round Dindigul is good, but that preferred for drinking is obtained from the brahmin's bowrie, to thc north of the town, and from a reservoir at the bottom of the rock, whieh is filled by the rains, and which when filtered is remarkably pure and wholesome.

The fortified rock on the western side of the town is a very remarkable looking wedge shaped mass of gneiss, veined with felspar, being a conspieuous objeet from all parts of the plain; the strata at its summit dip at about an angle of 75°, and lower down become exceedingly tortuous; nodules or irregular shaped masses of felspar three or four yards in cireumference are here and there imbedded in its structure; and in some fragments detached from the southern side garncts have been found. The roek is about 400 feet in length, and 300 in breadth, and its height by barometrieal mcasurement has bcen ascertained to be 280 feet, it is perfectly bare of vegetation, with the exception of a few patches of scanty soil in the upper fort, in which some stunted trees and shrubs grow, the ascent is on the eastern side by a flight of stone steps, the othcr sides being pcrpendicular; near the summit there is a well of great depth, erroneously supposcd by thc natives to be unfathomable, the water of which is exceedingly pure, and might easily be conveycd by pipes to the town, which would afford a constant supply, though perhaps not sufficient for the wants of the whole population.

Dindigul having been only occasionally occupied by troops since 1829, the usual table of diseases cannot be given; the

following however will shew the nature of those which have occurred during the years 1833, 35, 36 and the first six months of 1838, from an aggregate strength of 2,255 sepoys.

No. 14.—*Table exhibiting the admissions into hospital and deaths, amongst the native troops stationed at Dindigul, during the years* 1833, 1835, 1836, *and first half of* 1838.

Aggregate strength 2255		Admitted.	Died.	Total admissions from each class.	Total Deaths from each class.	Percentage of sick to strength.	Percentage of Deaths to sick treated.
Fevers....	Febris ephemera	99	0	430	4	19 ·064	0 ·930
	,, intermit quot.	288	1				
	,, remittens.....	4	2				
	,, com. continua..........	39	1				
	Cholera........	3	3	3	3	0 ·133	100 ·000
Diseases of the Abdominal viscera......	Diarrhœa..... ..	35	2	101	2	4 ·479	1 ·980
	Dysenteria acuta et chronica.	17	0				
	Hœmorrhois....	6	0				
	Obstipatio......	28	0				
	Dyspepsia......	15	0				
	Hepatitis.......	2	0	2	0	0 ·088	0 ·000
Diseases of the Lungs.	Catarrhus......	27	2	33	3	1 ·463	9 ·090
	Asthma....	3	0				
	Phthisis pulmonalis.........	1	1				
	Pneumonia.....	2	0				
Diseases of the Braiu.	Paralysis.......	10	3	13	4	0 ·577	30 ·769
	Mania..........	2	0				
	Delirium Tremens...... ..	1	1				
Eruptive fevers.......	Variola.........	4	0	28	0	1 ·241	0 ·000
	Varicella........	22	0				
	Erysipelas......	2	0				
Dropsies....	Anasarca.......	2	2	5	2	1 .221	40 ·000
	Ascites.	3	0				
Rheumatic affections.	Rheumat. acutus et chronicus.	147	1	147	1	6 ·588	0 ·748
Venereal affections....	Syphilis primitiva......... ..	44	0	71	0	3 ·148	0 ·000
	., consecutiva..	2	0				
	Gonorrhœa.....	12	0				
	Hernia humoralis............	11	0				
	Strictura urethræ..........	2	0				
Specific diseases......	Beriberi........	0	0	74	0	3 ·281	0. 000
	Dracunculus....	69	0				
	Lepra....	1	0				
	Scrophula......	4	0				
Diseases of the eye...	Morbi Oculorum..........	165	0	165	0	7 ·317	0 ·000
Do. skin.	Morbi Cutis....	80	0	80	0	3 ·547	0 ·000
	Other diseases...	457	0	*457	0	20 ·261	0 ·000
	Total..	1609	19	1609	19	71 ·352	1 ·180

* Of this number 157 were cases of ulcus.

Statement shewing the number of villages, hamlets, houses, inhabitants, &c., in the district of Dindigul from 1833 *to* 1835.

Names of the Talooks.	PARTICULARS.	FUSLIES. 1243	1244	1245	
Toddy Coomboo.	Villages	83	83	83	
	Hamlets	395	401	401	484
	Houses	12.870	12,811	12,900	
	Men	17,255	17,318	17,362	
	Women	17,702	17,827	17,891	51,473
	Children	15,538	15,975	16,220	
	Ponds	745	743	751	
	Tanks	137	137	137	
	Wells	2888	2906	2918	
Iyempully.	Villages	87	87	87	
	Hamlets	245	243	214	321
	Houses	15,841	16,099	16,023	
	Men	18,985	18,606	18,743	
	Women	20,023	19,178	19,720	55,831
	Children	17,912	17,538	17,368	
	Ponds	116	116	115	
	Tanks	81	76	77	
	Wells	2683	2708	2743	
Nelcottah.	Villages	84	84	84	
	Hamlets	366	367	373	457
	Houses	10,396	10,581	10,758	
	Men	14,318	15,507	15,646	
	Women	14,194	15,064	15,090	43,895
	Children	10,620	12,786	13,159	
	Ponds	231	224	283	
	Tanks	91	93	94	
	Wells	1603	1620	1639	
Marungapoory.	Villages	173	173	173	
	Hamlets	801	811	811	984
					2246 Total villages and hamlets.
	Houses	17,056	17,559	17,643	
	Men	22,436	23,500	22,956	65,861
	Women	21,660	22,336	22,737	
	Children	23,930	20,660	20,168	217,060
	Ponds	1109	1109	1085	2234 Total Ponds.
	Tanks	983	985	975	1283 do. Tanks.
	Wells	3266	3307	3277	10,577 do. Wells.

RAMNAD.

Situation and boundaries.

The large zemindary of Ramnad, which forms the south eastern part of the district of Madura, lies between the parallel of 9° 3″, and 10° 2″ of north latitude, and 78° 0″, and 79° 24″ of east longitude; stretching out in a south easterly direction towards the island of Ramisseram, from which it is separated by the Paumbum passage. It covers an area of upwards of 1,300 square miles, of which about one half is cultivated, the remainder consisting of sandy and waste land, marshes, and low jungle; it is bounded on the north by Shevagungah, on the south and east by the sea, and on the west by the district of Tinnevelly.

Foundation of the Zemindary.

The zemindary was granted to the ancestors of the present Rajah, with the title of Saidoobuddee, for the protection of the pilgrims resorting to the sacred pagoda of Ramisseram. The founder of the family was named Wodya Taven, who it appears exercised authority over a small district covered with jungle, and infested by robbers; on one occasion he escorted a relation of the king of Madura on a visit to the sacred shrine, who in reward for his good offices, procured for him an additional grant of territory, and conferred on him the title of Rajah.

General appearance of the country.

The country is an extensive plain, without a single hill or conspicuous eminence, or even wood of sufficient size to obstruct the view; trees, and those in small numbers, being only found in the vicinity of villages; the country seems, as far as the unfavourable nature of the soil will permit, to be well cultivated, but vegetation is so entirely dependant on the periodical rains, that with the exception of the wet months, its general appearance is naked and uninteresting. The interior is entirely free from jungle, but the Babool tree abounds in the vicinity of the sea, which with the palmyra and cocoanut tree, forms a complete belt of vegetation along the coast.

Sea Coast.

The southern part of the coast is faced with rugged rocks, which extend for some distance into the sea, rendering the navigation dangerous; and the neck of land which runs towards Ramisseram, is almost entirely composed of sand, covered with a low brushwood, and scanty grass; it terminates abruptly, there being a break or chasm, of about 2,250 yards wide, between the island and the main land, the general direction of which, and the shattered appearance of the bank at both sides, rendering it pretty certain that they must at one time have been connected.

Soil.

The soil in the interior and western talooks, is black cotton ground, and in the eastern parts, for a distance of about 15 miles from the sea, light and sandy; with the assistance however of manure, a large portion is brought under cultivation, and during the wet season tolerable crops of dry grain are obtained. Even the most unfavourable portions of the country are not entirely unproductive, as the valuable chay-plant, from the root of which a beautiful red dye is extracted, grows spontaneously in the sand; and is found in great abundance along the coast, often growing in what appears to be the most sterile spots.

Division of the country, & population.

Ramnad is divided into 17 talooks, the population of which, and the number of villages, are as follows:—

TALOOKS.	Villages.	Males.	Females.	Children.
Ramnad	160	10,447	11,476	11,654
Keelacaad	53	6137	6554	6596
Chekal	140	3950	4132	3696
Moodacoalatoor	112	2928	3009	2329
Papancolum	111	4607	4936	4573
Camoothi	148	8714	8800	6435
Abramem	185	5815	6000	5816
Vindoni	87	6166	5723	2762
Camencoattay	191	7615	7855	6527
Salygramem	81	5075	5127	4120
Rasingamungalum	78	3274	3284	2190
Arnootamungalum	191	5553	5450	3397
Anoomentagoody	184	5009	5142	4441
Gootaganaud	86	3510	3572	2843
Oroor	107	3533	3431	2715
Cotahpatam	25	877	829	637
Pullimuddhum	223	19,094	19,733	19,788
Total	2165	10,2364	10,5053	91,489

Hindoos.

The population in the interior consists chiefly of hindoos, who are generally poor, and engaged in agricultural pursuits; but a few of them are occupied in the manufacture of cotton cloth.

Mahomedans & Lubbays.

In every town there are some mahomedans, most of whom work in iron; the inhabitants of the towns on the coast are principally mahomedans or lubbays, and roman catholic christians, the former amounting to about 27,000, and the latter to 10,000; the lubbays are an active and enterprising race, and were formerly possessed of considerable wealth; they are still comparatively independent, their houses being larger, and having more the appearance of comfort, than those of the hindoos; they are said to be haughty and irascible; but when treated with kindness obliging, communicative and intelligent; they engage in trade both by land and sea, and a few are mechanics. Many of the lubbays are acquainted with arabic, but the tamil is the language universally spoken by all classes.

Native Christians.

The christians are employed as fishermen, and are apparently very poor, their villages consisting of mean huts erected along the sea beach, having usually a small church attached to them in a conspicuous position.

Decline of manufactures.

It seems to be generally admitted, that the people are in worse circumstances than they were 25, or 30 years ago, when numbers were actively engaged in the manufacture of cotton and silk cloths for exportation, as well as for home consumption; the free admission of English cotton cloths, has since seriously injured the commercial and manufacturing part of the community, who are unable to compete with foreign produce; and they are now idle and impoverished, many of them having through necessity become cultivators.

Principal towns.

Ramnad, the capital, is about two and a half miles in circumference, surrounded by a wall and ditch, and defended by numerous small bastions, but the works are now in a ruinous condition, and the ditch nearly filled up.

Fort. The fort was built about 250 years ago, by Magana Ragoonada Saied-budday, who also constructed a large tank near it, on the north side.

Zemindar's palace. The Zemindar's palace, composed of four square buildings of two and three stories high, stands in the centre of the town; it is an ancient structure ornamented in the native style, but going to decay. Adjacent to the palace, is a large and handsome bungalow, which belonged to the late Colonel Martinz, who resided here for many years in command of the garrison and district, near to which is a small Protestant Church. protestant church, and vestry in good repair. The burial place of the Rajahs, containing several granite tombs, is on the opposite side of the tank. A small roman catholic church, near the south-east corner of the fort, and a pagoda in the centre of the town, are the only other objects worthy of notice.

The fort contains about 5,000 inhabitants, chiefly dependants of the Zemindar, the houses are generally built of mud, and thatched; the streets, with one exception, are irregular and narrow, but they are kept tolerably clean.

A large portion of the inhabitants reside outside the walls, on the eastern side near the principal entrance to the fort; they amount to about 5,000, chiefly hindoos, who are engaged in agricultural pursuits, and as grain merchants; and a few occupied in manufacturing coarse cloths; there are two rows of bazars regularly built, with tiled roofs, where a market is held every Wednesday.

Military detachment. Ramnad is garrisoned by a company of native troops, under a European officer; and is the residence of the assistant to the collector of Madura. The sepoys have no separate lines, but occupy houses indis- Place of arms & Hospital. criminately with the inhabitants; the place of arms, and a small substantial building, used as an hospital, are within the fort, and are sufficiently commodious for the detachment.

Dwelling of Europeans.

In the vicinity of the town, in an open sandy plain, are the houses of the European officer, and of the assistant to the collector, with the ruins of several buildings in the vicinity, which formerly belonged to the Commercial Residency. It is a hot station, but the evenings are usually cool, from the influence of the sea breeze, and it has hitherto proved very healthy.

Ramnad stormed in A. D. 1772.

Ramnad is memorable from having been stormed by General Smith in A. D. 1772; and likewise from an affray in the year 1797, in which Lieutenant Clark was killed, when endeavouring to seize the celebrated Poligar chief, Cotabomia naig.

Town of Keelacarney.

Keelacarney is a sea port town situated nine miles south west from the capital, having a population of about 7000 mahomedans, who are engaged in trade; they follow a variety of handicrafts, and manufacture a considerable quantity of long cloths, but both trade and manufactures have lately been on the decline.

There are several mosques and musselmaun tombs in the town; also a roman catholic church, and the ruins of a Dutch factory.

The coast at this place abounds with rugged rocks, which appear when the tide is low.

Town of Deviputtam.

Deviputtam, also a sea port and populous town chiefly inhabited by lubbays, is known by the name of the "nine-stones," from the circumstance of a natural bath being formed by nine rocks in the sea, at some distance from land, which has been held sacred from the most remote antiquity. A visit to this bath is considered necessary by all pilgrims, on their way to Ramisseram. There is a well built choultry here for the convenience of travellers, where alms are bestowed daily.

Village of Davacottah.

Davacottah, a populous village, is situated on the north bank of the Verashclagaur river,

the houses are poor looking, and the streets irregular, narrow and filthy; but notwithstanding its appearance, it is one of the most important places in the district on account of its trade, and the numerous wealthy chetties who reside there; these people live in a mean style, but distribute much charity; they do not salaam to superiors, but make their acknowledgments by rubbing the hand on the belly.

Village of Mootapettah.

Mootapettah, a fishing village situated ten miles south-east of Ramnad, is inhabited by roman catholic christians, who have a church in the centre of the village, the officiating priest being a native of Goa. At a short distance, close on the sea shore, two thatched bungalows have been erected for the convenience of the European residents in the district, which are occasionally resorted to, during the sultry and oppressive months of March and April.

Autuncaray.

Autuncaray, a small sea port, eleven miles east of Ramnad at the mouth of the river Vigay, is inhabited chiefly by fishermen; coasting vessels enter the river at certain seasons of the year, and carry on a trade in rice, and other products of the district; the best tobacco grown in the southern provinces is obtained from this neighbourhood. There is a spacious and substantially built choultry here, which was erected, and liberally endowed by the late Zemindar, where alms are daily distributed to pilgrims, on their way to and from Ramisseram.

Village of Arnootamungalum.

Arnootamungalum, and about a dozen other villages lying north of the Collycurray, and south of the Nunnymuttoo rivers, are inhabited by a peculiar tribe called vellaulers, who according to tradition, established themselves in this locality about 400 years ago; their women are prohibited covering their breasts, and are strictly forbidden to pass the boundary, formed by the two rivers.

These people will not hold any situation under government or other authority, and are employed solely as cultivators, and they

refuse to pay obeisance to any one, further than by rubbing the right hand on the belly.

Town of Purmagoody.

The town of Purmagoody, is situated on the south bank of the Vigay river, 22 miles north-west of the capital; it contains upwards of 1,000 houses, and about 5,000 inhabitants, principally weavers of silk and cotton cloths.

Town of Abramum.

The populous town of Abramum, on the road to Madura, is inhabited by musselmans, chetties, and vellaulers; the two former are engaged in trade, and the latter as cultivators; from the abundant supply of water in this neighbourhood from the Yary, rice is extensively cultivated, two crops being obtained annually.

Verasholen, a village about seven miles north west of Abramum, was formerly the residence of a Rajah, in whose days it was very populous, and many remains of antiquity to be met with, show that it was once a place of some consequence; the present population is inconsiderable, consisting of mahomedans, collaries and marravers.

Rivers.

Numerous streams flow through the zemindary, but few of them are of sufficient magnitude to call for particular notice; their beds are broad and shallow, from the peculiar nature of the country, and their flowing over an almost level surface; during the freshes which occur in October, and November, and occasionally in April, the water is diverted into numerous tanks, and in the hot months, water is always procurable by digging in the beds of rivers; along the banks, of which *pecottahs are erected, for the purposes of irrigation.

The principal streams are the Pambanaur, Veeashelayaur, Munnymootoo, Vigay, Cottaycuraur, Kredamaundthy, and Trimungalum.

Marshes and Tanks.

An extensive back-water, situated in the southern extremity of the zemindary, and extend-

* Wells worked either by bullocks or men

ing over a spaee of ground about 15 miles in circumference, emits during the hot season a most fœtid smell; and there are likewise numcrous tanks throughout the eountry.

Roads. There are no made roads, and the traeks are so soft and sandy, that traffie betwixt the coast and towns in the interior, is thereby mueh impeded.

Climate. The elimate though hot, is agreeable at plaees whieh are within the influenee of the sea breeze; the north-east monsoon prevails throughout October, November, and until the middle of Deeember, and the weathcr is cool and agrceable till February; but March, April and May are hot and disagreeablc, particularly in the interior.

Diseases. There are no diseases endemic to the eountry, which for a number of ycars past has been singularly free

Cholera. from severe visitations of siekness.—Cholera appeared in the years 1829, 32, 33, and 37, but to a very par-

Fever & diarrhœa. tial extent. Fever and diarrhœa gcnerally prevail during thc wet season, but these diseases are mild and

Ulcers. tractable, rcadily yielding to simple trcatment. Ulcers have been eommon amongst the scpoys, but they do not appear to prevail amongst the permanent residents, to any grcat extent.

During thc ten years, from 1829 to 1838, out of a detaehment averaging 110 in strength stationed at Ramnad, only six dcaths, exclusive of cholera, are recordcd.

No. 15—Table exhibiting the number of admissions into hospital and deaths, amongst the native troops at Ramnad, from 1829 to 1838 inclusive.

CLASSES	DISEASES. (Aggregate strength 1104.)	Admitted.	Died.	Total admissions from each class.	Total Deaths from each class.	Percentage of sick to strength.	Percentage of deaths to sick treated.
Fevers......	Febris ephemera	54	0	163	4	14 ·764	2 ·454
	,, intermittens..	55	3				
	,, remittens....	2	0				
	,, com. continua........	52	1				
	*Cholera..........	41	18	41	18	3 ·713	43 ·902
Diseases of the Abdominal viscera......	Diarrhœa..... ..	1	0	30	0	2 ·717	0 ·000
	Dysenteria acuta et chronica	27	0				
	Obstipatio......	2	0				
	Hepatitis.......	0	0	0	0	0 ·000	0 ·000
Diseases of the Lungs.	Catarrhus......	10	1	12	1	1 ·086	8 .333
	Asthma.........	2	0				
Diseases of the Brain.	Apoplexia.......	1	0	3	0	0 ·271	0 ·000
	Amentia........	1	0				
	Mania..........	1	0				
EruptiveFevers......	Variola.........	0	0	2	0	0 ·181	0 ·000
	Varicella.	0	0				
	Rubeola.........	2	0				
Rheumatic affections ..	Rheumat. acutus et chronicus.	91	0	91	0	8 ·242	0 ·000
Venereal affections ..	Syphilis primitiva..........	10	0	12	0	1 ·086	0 ·000
	Gonorrhœa.....	2	0				
Diseases of the eye,..	Morbi oculorum...........	30	0	30	0	2 ·717	0 ·000
Diseases of the skin.	Morbi Cutis.....	12	0	12	0	1 ·086	0 ·000
	Other diseases..	188	1	†188	1	17 ·029	0 ·532
	Total......	584	24	583	24	52 ·902	4 ·109

* Cholera occurred in 1829-32-33 and 1837.

† Including 164 admissions from ulcus, and one death.

Commerce and Manufactures.

The commerce of this zemindary was formerly very extensive, and a commercial resident, with an assistant, were for many years established at Ramnad, for the purpose of procuring cloth for the English market; a large proportion of the inhabitants were manufacturers, and the mahomedans carried on an extensive, and valuable trade in piece goods, with the Eastern islands, and the Persian gulph; but the manufacture and exportation of piece goods, have to a great extent, been superseded, by the

introduction of English cloths. Coarse cloth is however still made in considerable quantity, but chiefly for the use of the country itself.

Imports and Exports.

The principal imports are spices, ghee, oil, betelnut, wood, iron, sugar, and pearls; and the exports, chay root, * chanks, salt, saltfish, tobacco, cotton, skins, paddy, and coarse cloth.

Wild animals.

There are no wild animals, peculiar to the district; antelopes, and wild hogs are to be met with, but they are by no means numerous.

Chank shell fishery.

About one million of chank shells are collected on the coast annually, and forwarded to the Calcutta market; the fishery is rented for about 5,000 rupees per annum.

Cattle.

This province is well stocked with cattle as appears from the following statement, but from the scanty pasturage, they are of small size, and in indifferent condition:—

Number of	cows	47,776
do.	bullocks	47,428
do.	calves	21,478
do.	male buffaloes	8,468
do.	female do.	18,472
do.	sheep	2,75,072

* A description of uni valve shell (Species, Dollium) of a pure white colour, which is in great request in Bengal for the manufacture of toe rings and other native ornaments.

ISLAND OF RAMMISSERAM.

Ramisseram its situation.

Ramisseram, or Ramisswaram, an island on the coast of Ramnad, is situated between Ceylon and the continent of India, from which it is separated by a narrow strait, called the Paumbum channel; the town of Ramisseram lies in N. latitude 9° 17″, and E. longitude 79° 21″.

It is generally supposed that this island at one time formed a portion of the continent of India, from which it was detached about the end of the 15th century, by the sea breaking through a chain of rocks which formed the connexion. The abrupt manner in which the coast at point Ravan terminates, its geological formation, which is identical with that of the opposite portion of the main land, and the direction of the ridge across the channel, almost confirm the supposition; and the opinion is further strengthened by the records of the pagoda at Ramisseram, which state, that until the early part of the 15th century, the island was connected with the continent, by a narrow neck of land, and, that the Swamy of Ramisseram, on particular festivals, was carried in procession to a pagoda which is now on the main land.

During the reign of Achoodapah naig, Rajah of Madura, about the year 1480, a small breach was made in the isthmus, by a violent storm, but as there was no great depth of water, it was passable on foot, till the time of his successor Vissoovarada naig, when the breach was much enlarged by another storm; and since that period every succeeding gale has assisted in breaking down the remaining connexion; the destruction of which, the inhabitants state, is still going forward, every 15 or 20 years making a sensible alteration in its appearance and extent.

History of Rammisseram. The name and history of Rammisseram are intimately connected with hindoo mythology, and it is considered a place of peculiar sanctity. According to traditionary accounts, Ravan king of Lunka (Ceylon) stole away the wife of Ram, or Ramma, (an incarnation of Vishnoo,) to recover whom, Ram collected an army of monkeys under the great Hun-nu-man ; this army, under their divine leader, made a bridge of rocks from the continent to Ceylon, the remains of which is called Adam's bridge. The way being thus prepared they invaded the island, defeated the king, and recovered the stolen lady. Ramma on his return from Ceylon was observed to have two shadows, a peculiarity said only to attend sinners of the deepest die ; but on his arrival at Gundamanthrun, the original name of the promontory which now forms the island, the additional shadow disappeared, and he was informed by an attending priest, that he stood on holy ground, and that in consequence his sins were forgiven. Here Ramma performed ablutions, and solemnized the event by festivities ; he at the same time sent to Benares for a lingum, and fashioned another with his own hands, out of a little sand, both of which are now carefully preserved in the sanctuary of the temple. From that period the island has been dedicated to him, and called Rammisseram ; and in the expectation of reaping worldly advantages, which have been liberally promised, and immediate happiness after death, said to be insured to all who visit the sacred shrine, and attend to the ceremonies enjoined, pilgrims in vast numbers resort to it from remote parts of India.

Extent and general appearance. The island, which is of a very irregular shape, is about 11 miles in length, by 6 in breadth ; at the south east extremity there is a narrow slip of sand, twelve miles in length, stretching towards Ceylon, nearly joining the chain of sand banks, which separate the gulf of Mannar, from Paulk's bay, and known as Adam's bridge. This bank is gradually increasing in length, and indicates the manner in which the island, and the adjacent portion of the peninsula, have been formed ; the sand shells

and debris of the coast, thrown up by the violence of the monsoons, being deposited where the opposing currents, from the east and west meet; these materials gradually become consolidated, forming horizontal strata of sand stone, resting on a bed of gravel.

The extreme point of this neck of sand, at the meeting of the waters, is the spot where Ramma was absolved of his sins, and where devotees perform their ablutions before visiting the pagoda, and here the ashes of the dead, usually of persons of distinction, brought from remote parts of India, are committed to the sea.

The surface of the island is low, hillocks of sand raised by the wind, being formed here and there, with small valleys between them, occasionally containing stagnant water. A considerable portion of the land is covered with Babool jungle, and on the south-west, and north-west sides, cocoanut and palmyra trees abound.

Soil. The only soil to be met with, is on a small space about two miles square, near the centre of the island, except where fallen leaves have in some places formed a scanty mould, on which a coarse stunted grass grows; in the vicinity of the villages also, by the use of manure, small tracts of land have been brought under cultivation.

Wells and Tanks. Rammisseram is abundantly supplied with excellent water, from numerous wells and small tanks; and wells are usually attached to the choultries, erected for the convenience of pilgrims.

Lakes Marshes &c. In the vicinity of the town of Rammisseram, there is a fresh water lake about three miles in circumference, which is filled by the rains; and an extensive salt marsh is formed by the sea breaking over the sand banks during the N. E. monsoon, on the south side of the island, about three miles from Rammisseram; and near Paumbum there is also a narrow back-water, about two miles in length.

Climate. From the peculiar situation of the island it enjoys the benefit of both monsoons, and with the exception of two months in the year, March and September, the weather is cool and pleasant, the thermometer ranging from 75°, to 85°.

The north-east monsoon sets in about the 20th of October, and ends about the same date in January; during February and March, there are alternate land and sea breezes, and southerly winds in April and May. The S. W. monsoon sets in early in June, and lasts till the middle of August, from which period till the middle of October, the winds are light and variable.

The marshes above mentioned, appear to exert a deleterious influence upon the health of the inhabitants on the eastern side of the island; severe fevers being occasionally met with at Rammisseram, accompanied by glandular enlargements, whilst the inhabitants of Paumbum are perfectly healthy. In 1839, 300 people fell victims to the epidemic fever at Rammisseram, while at Paumbum the disease was comparatively mild and tractable, and no death occurred from it, either amongst the sepoys stationed there, or the convicts employed on the work of opening the channel.

Epidemic Fever.

Population. But for the sacred character which the island has obtained, it is very probable that it would have remained uninhabited, except perhaps by a few fishermen. No manufactures of any kind are carried on, and it is entirely dependant upon other places for its supply of grain. The money circulated by a large though fluctuating population, and the necessities of a numerous, and wealthy body of brahmins, have however induced many persons of inferior castes, to settle on this sterile spot, and bring under partial cultivation, a soil which in other circumstances would have remained an arid waste, and Rammisseram has in consequence become the residence of many wealthy natives, and the centre of a considerable traffic.

The fixed population is estimated at 4,288, viz.

Brahmins	811
Lubbays	620
Native Christians	372
Other Castes	2,485
Total	4,288

Pilgrims. The number of pilgrims who annually visit the island seldom exceeds 30,000; and it appears from the records of the pagoda, that they are not only of a less respectable class, but that their numbers have of late years much decreased; in former days persons of the highest rank were amongst the pilgrims, which is now rarely the case.

Brahmins. The brahmins are chiefly supported from the revenue of the pagoda, and by fees and presents received from hindoo visitors; they make a practice, prior to each of the principal festivals, of going some distance to meet wealthy pilgrims, whom they take under their protection, conduct them to the prescribed places of devotion, and instruct them in their ablutions, prayers and offerings; they also receive them into their houses during their stay, for which they are always well remunerated.

Lubbays. The lubbays are principally engaged as fishermen, pilots and boatmen at Paumbum, and a number of them are also employed as divers, at the works for clearing the channel, now carrying on; but a few of the more respectable are grain merchants.

Native Christians. The native christians, who are roman catholics, are chiefly fishermen and pearl divers, they are a poor and wretched race.

Schools. There are 10 schools on the island, with about 160 pupils, between 50 and 60 of whom are brahmins, from 30 to 40 lubbays, the remainder being of various other castes. Tamil is the chief language taught at these schools; but the lubbay boys learn to read the Koran, and to repeat

prayers in arabic; and a few of the brahmins are instructed in sanscrit.

Tamil is the language spoken on the island, but as pilgrims frequent it from distant parts of India, many of the brahmins are able to converse with them in various other tongues.

Domestic Animals. The domestic animals are but few, as shown by the following statement.

Number of	bullocks	48
do.	cows	930
do.	female buffaloes	209
do.	male do.	10
do.	sheep	414

The cattle are extremely diminutive in size, but are well formed and hardy.

Tattoos or ponies are bred in considerable numbers, but from want of good pasturage, they are weak and ill-grown; they are used in large droves for carrying grain, and are also hired by the pilgrims.

Hares, and Partridges. The island abounds with hares, and partridges.

Vegetables and fruits. The gardens yield a tolerable supply of country vegetables, and a few plantains; orange, lime, citron and pomegranate trees, are also to be met with.

Betel, oilnut, cumboo, raghee and cotton are also cultivated to a small extent; and the chay plant grows spontaneously along the coast.

Commerce. A traffic is carried on in rice, cloths, and oil, principally for the use of the inhabitants; and some of the natives of Paumbum possess shares in vessels, and trade with the principal ports, on each side of the Indian peninsula, and with Ceylon, in grain, timber, oil and iron.

Coarse cloth for the use of the inhabitants, is made to a limited extent.

Town of Rammisseram. The town of Rammisseram is situated on the eastern side of the island, close to the beach, it contains nearly 1000 houses, most of which are well built, and many of them terraced, and has some good streets running at right angles with the pagoda; the inhabitants are chiefly, the attendants on the pagoda. The management of the affairs of the pagoda, is in the hands of the *pundarem,* as he is called, who is of the soodra caste, doomed to celibacy, and is descended from a family who have possessed the office for nearly a century. The pundarem has the right of naming his successor, his selection being always confirmed by the zemindar of Ramnad, and as the appointment is considered one of high dignity, he generally nominates one of his nearest unmarried relatives.

Pagoda. The Pagoda, the great object of attraction, stands nearly at the east end of the town, and is far less imposing in appearance, than either that of Madura or Chelumbrum; indeed it owes its celebrity chiefly to its having been erected on a spot of peculiar sanctity, connected with the legend of Ramah's visit, and from its possessing the two lingums already mentioned; these emblems of Siva, and objects of adoration to his followers, are carefully preserved in the temple, and are daily washed with water from the sacred Ganges.

The pagoda forms an enclosed quadrangle, the exterior walls of which, running north and south, are 657 feet in length, the east and west sides being nearly 1000 feet; there are three entrances, and it has a tower, or goperum, which is about 100 feet high, covered with the usual mythological figures; the door-ways are 19 feet high, each side consisting of a single stone; on passing through one of the door-ways a colonnade of magnificent proportions is seen, and is the only object of interest to the European visitor; it is perhaps one of the most remarkable structures of the kind in existence, and the effect produced, on first entering the building is very striking from its vast size, the innumerable columns

which support the roof, and the massy and enduring nature of the materials. Its length from north to south, is 353 feet, and from east to west, 671 feet, by 17 in breadth; the ceiling is composed of large slabs of granite, supported by carved pillars, of the same material, raised on each side on a platform 5 feet high, the pillars are upwards of 12 feet in height, and most of them formed of single blocks of stone. As no granite is found on the island, the labour of cutting and transporting these immense masses a distance of nearly 40 miles, from whence it is said they have been brought, must have been very great.

In the colonnade leading from the door-ways to the interior of the temple, are figures representing the Rajah of Ramnad, by whom it was built, with his family and ministers; he was the ancestor of the present Ranee.

Immense sums were formerly lavished in presents to the temple, both in money and jewels, the latter alone, being said to be worth several lacs of *pagodas; and, for facilitating the pilgrims on their journey, choultries where alms are daily bestowed, are erected all along the coast of Ramnad, and the road from Rammisseram to Paumbum, a distance of eight miles, is flagged, a choultry being erected at every mile, with wells and numerous small pagodas.

The annual revenue is upwards of forty thousand rupees, derived principally from pagoda lands, and a part from donations.

About a mile and a half north of Rammisseram there is a small hill, about 30 feet in height open on all sides, on which a building consisting of two stories, has been erected; from the upper story is an extensive view of the whole island, with a part of Adam's bridge; and should the trade increase, consequent upon steamers and other vessels, being enabled to pass through the channel, this spot would be a good situation

* A coin equal to 3¼ Rupees.

for a light house ; at present from the land being low, mariners have only their soundings to guide them in approaching the coast.

Paumbum, town of.

Paumbum is a small mercantile town, on the western extremity of the island, which derives its name from the snake-like channel, which separates the island from the mainland; it contains about 200 houses, several of which have tiled roofs, they are built either of stone or mud, and the streets are narrow and irregular.

The population chiefly consists of lubbays, who are an industrious people, actively engaged either as pilots, boatmen, or divers, and a few as merchants.

Detachment of Sappers, and Convicts.

A European officer with a detachment of about 100 sappers and miners, and a gang of 150 convicts, are stationed here; the camp followers amounting to about 300, and as the coasting trade is on the increase there has been a considerable influx of money of late, causing a visible improvement in the condition of the inhabitants.

Sepoys lines.

The officer commanding the detachment has a comfortable bungalow, situated in a grove of trees within 30 yards of the sea; and the sergeant and apothecary have suitable quarters a little to the rear; the sepoys are hutted in a cocoanut tope about a couple of hundred yards from the beach; the situation of their lines is low, confined, and being annually flooded during the north-east monsoon, must consequently be damp; there is however no other eligible ground within a less distance than half a mile.

Healthiness of Paumbum.

The medical returns of the detachment, including also those of the convicts, prove that it is a particularly healthy spot, the complaints from which they have hitherto suffered, being chiefly caused by accidental circumstances, and by the nature of the works on which they have been employed.

The following return shows the diseases which have prevailed during three years; in which period only one death has occurred.

Statement of the sick of the detachment of Sappers and Miners, and Convicts.

		Strength.	DISEASES. Febris Ephemera.	" Int Quotid.	" Rem'ttens.	" Continua.	Ophthalmia Acute.	Cynanche.	Pneumonia.	Hepatitis Acuta.	Cystitis.	Rheumatism Acutus.	Hæmorrhois.	Catarrhus.	Dysenteria Acuta.	Apoplexia.	Dyspepsia.	Tetanus.	Colica.	Diarrhœa.	Syphilis Primitiva.	Icterus.	Fractura.	Other Diseases.	Total treated.	Total Cured.	Died.
Detachment Sappers and Miners.	1837	97	4	1	7	16	13	1	0	1	0	13	0	9	6	0	3	0	18	9	3	0	0	122	226	226	0
	1838	95	0	11	0	27	10	1	0	0	0	16	1	11	2	0	7	0	2	4	3	2	0	74	171	171	0
	1839	96	0	77	1	28	17	1	0	0	1	22	3	2	5	1	12	0	4	6	3	0	0	73	256	255	1
Convicts.	1837	49	12	1	0	29	9	1	0	0	0	17	0	18	6	0	14	0	27	30	1	0	0	158	323	323	0
	1838	129	0	11	0	68	14	5	0	0	0	26	6	1	10	0	10	0	5	27	1	0	0	131	315	315	0
	1839	142	0	98	1	40	9	0	1	0	0	16	6	2	9	0	3	1	14	16	2	2	1	116	337	337	0

Opening of the channel.

The circumstance which at present gives interest to Paumbum, is the opening of a channel for vessels between it and the mainland, with a view of improving the coasting trade, and affording a free communication with the western ports, without the necessity of circumnavigating Ceylon.

Dhoneys and small vessels have, for the last 40 or 50 years, been enabled to cross the bar, after disembarking their cargoes, though with considerable difficulty and danger; the obstacles being so numerous, that they generally

took several days in working through. In 1828 and 29, the subject was brought to the notice of Government, and a committee of engineer officers under lieutenant colonel Sim, were directed to survey the channel, and report on the practicability of opening a passage through it, either at Paumbum, or through Adam's bridge; a small detachment of pioneers, was at the same time employed in removing some of the principal obstacles, in the channel; which was then made 40 feet wide, and between five and six feet deep at spring tides; but was still very tortuous, and vessels in passing through, were obliged to use three or four warps, as in many places it formed an angle with the current.

In 1837 the works were resumed, at the recommendation, and under the direction of colonel Monteith, the Chief Engineer, and since that period have been carried on every season, and will it is supposed be persevered in, till vessels drawing from 10 to 12 feet water, can pass through with safety; but even now small sized steam vessels make the passage.

The channel, a plan of which is given, is at present about 1,200 yards in length, 100 feet wide, and has a depth of water, of between eight and nine feet at spring tides.

This undertaking has already begun to exert an influence upon commercial industry; and when complete will be a work of great public benefit.

Coasting trade, amount of Tonnage.

The increase of trade which has already resulted is shown in the following statement.

	1837.	1838.	1839.
Amount of tonnage passed through the channel.	25,289.	50,005.	65,326.

Anchorage and custom duties are levied by Government on all vessels, but pilotage is paid to a body of lubbays, who hold their situations by *Merassee;* and a ferry is kept up by the zemindar, for the convenience of travellers.

PLAN of the PAUMBEM PASS, and the ISLAND of RAMISSERAM.
3 Miles to One Inch.
Miles
Mile
Ramisseram
Salt Swamp
Huts
Paroowuddum
Ariagoondoo
Chultrum
Choultry
Coil
Maunlope
Mochemdy
Roman Church
Paumben
Pagoda
Munddaum
Madras Lith. Press.
B.C. Regel, del.

TANJORE.

Situation Boundaries and Extent.

The province of Tanjore is a very fertile, and populous country, in the southern Carnatic, lying principally between the 10th and 11th degrees of north latitude, and the 78th and 79th degrees of east longitude; it is bounded on the east and south by the sea, on the west by Trichinopoly, and the country of the Tondiman Rajah, and on the north by the Coleroon river. Its greatest extent from east to west, is 75 miles, and from north to south 115, forming an area of 3,900 square miles with a population estimated at 972,902 souls. The number of towns and villages

Chief Towns.

is estimated at upwards of 6,000. Of these, the chief inland towns are Tanjore, Myaverum, Combaconum, Mannargoody, and Trevalore; and the chief sea ports, Negapatam, Nagore, Karrical belonging to the French, Tranquebar a Danish settlement, and Davicottah at the northern confines of the district. The surface of the country is a low, level, and highly cultivated plain, devoid of mountains, hills, or any considerable elevations, and covered nearly throughout its whole extent with paddy fields, interspersed with topes of cocoanut trees. The province is plen-

Rivers.

tifully supplied with water from branches of the river Cauvery, throughout its whole extent. The three principal of which are, the Vennar, Codamoortee, and Verashalen, on its southern bank; of these, the former is the most important, and supplies all the southern part of the district, it gives off several large branches, and its waters are entirely dispersed before it reaches the sea; the others terminate in open mouths on the coast. In the months of March, April and May, all the streams except the larger ones become dried up, and the waters of these are then sluggish, and nearly stagnant The Cauvery is twice filled during the year; first in June and July, by the S. W. monsoon, when it receives an immense influx of water from the mountainous regions, in which its

tributary streams take their origin; and again in November, by the N. E. monsoon. To regulate the distribution of water, and prevent inundations, *annicuts, sluices and embankments, have been formed near the island of Seringham. By these means an abundant, and equable supply of water is rendered available for the lands in Tanjore, and a tract of country, which would have otherwise been a barren sandy plain, has become the most fertile, rich and populous district in the Madras presidency.

Soil. The soil is generally dry and sandy, but at several places along the coast, there are extensive alluvial marshy surfaces, which during the monsoon become covered with sea water, from which salt is deposited in the dry season by evaporation; the two principal salt marshes are situated near Point Calymere, and yield a considerable revenue to government.

Climate. The climate is very healthy, and entirely free from miasmatic exhalations, the temperature being much the same as in other parts of the Carnatic, till the month of June, when the rivers are filled, and the heat thereby becomes moderated. From February, till the middle of October, westerly or land winds prevail, which from passing over extensive, arid and sandy plains, become hot and scorching, particularly in March, April and May, which are consequently the hottest months in the year, and those in which there is the least diurnal variation of temperature; at this time the sea breeze, which sets in daily about one o'clock P. M., greatly moderates the heat on the coast, and at places within its influence.

The inhabitants are very healthy, and enjoy a great immunity from visceral diseases of all kinds, and until the commencement of the monsoons, the coast is well adapted as a place of resort for convalescents, on account of its equable and moderate temperature, together with the refreshing coolness of the sea breeze. Point Calymere salubrity of. Point Calymere is much famed for the salubrity and coolness of its cli-

* Dams running diagonally across a stream.

mate, during the hot months, being situated on the coast about 28 miles south of Negapatam, at a point where it bends, and takes a due westerly direction for upwards of 30 miles, before it again runs south. The coast at Point Calymere forms a considerable promontory, having the sea on both sides, where the south west is no longer a land wind, as on other parts of the coast, but becomes a pleasant sea breeze; the place is therefore an agreeable retreat, during the hot months in the interior.

The N. E. monsoon commences about the middle of October, when the wind veers round to that quarter, and a great fall in the temperature takes place; the wind blows obliquely across the bay of Bengal, and is cool, strong and gusty; the sky is generally obscured by dark lowering clouds, and frequent heavy falls of rain take place, occasionally accompanied by vivid flashes of lightning, and loud peals of thunder; the mornings are cold, raw and hazy, the atmosphere being loaded wtth moisture; the natives seem to suffer most at this time, slight cases of fever, colds and catarrhs, being very common; and now and then smart cases of dysentery are seen. During the monsoon in 1836, although rain was abundant on the coast, it did not extend to any distance in the interior, where a great scarcity was experienced from partial failure of the rice crops.

Agricultural productions.

With regard to agriculture, it may be observed that rice is the grain chiefly cultivated, the whole surface of the district being nearly one continued succession of paddy fields; in all those places, to which remote branches of the rivers already enumerated do not penetrate, artificial channels leading from them, are formed for the purposes of irrigation; and in consequence of their being filled by the south-west monsoon, through the medium of the Cauvery, as well as by that from the N. E., the lands afford two or three successive crops annually. Small quantities of cotton, and a coarse kind of tobacco, are cultivated in the southern parts of the district; a good deal of the latter is con-

sumed by the natives, in chewing. Dry grains are but little grown; the following however are to be found, gingcly seed, natcheny, panicum italicum, and holcus spicatus, all of which are occasionally used by the natives, made into cakes. The following leguminous plants are also cultivated, viz. oolandoo, dholl, putchapiroo, mochacottah, and Bengal and Madras gram. The castor oil plant, and the lamp oil tree, grow in abundance, as do also the coriander and cummin plants; the latter being much used by the natives in curries, and other dishes. A considerable quantity of indigo is reared by the natives for dyeing piece goods; all kinds of garden produce thrive well, as onions, garlic, chillies, brinjal, cucumbers, melons, pumpkins, betel leaf, fennel &c.; and fruit is good and plentiful; there are several large gardens in the neighbourhood of Myaverum, in which fruit trees of all kinds are cultivated, and attain great perfection.

Roads. There are tolerably good roads between the principal towns and villages, which are at all times passable, being considerably raised above the level of the surrounding plain.

Town of Tanjore. The town of Tanjore, the capital of the district, and the residence of the Rajah, whose territory extends to some distance round, contains a population of 80,000 souls, and is situated in an extensive flat plain, about 45 miles from the sea. The fort which is about 4 miles in circumference, is surrounded by a lofty fortified wall, and a ditch which is in some parts dry, and in others half full of stagnant water. The streets within the fort are irregularly built, and there are various alleys, and courts in every direction, without regard to arrangement; a wide space has however been left, between the ramparts and the houses; it contains also numerous pagodas, elevated considerably above the surrounding buildings. The houses of the respectable portion of the inhabitants are substantially built of brick and chunam, and in many cases are tastefully decorated; those of the poor, are built of mud, (which from the tenacious quality of the soil, is

well adapted for the purpose) and tiled; the villages outside the fort, are with but few exceptions built of mud, and thatched, the streets being narrow and irregular. A free communication exists between Tanjore, and the neighbouring towns of Trichinopoly, Combaconum, and Negapatam, by means of good roads.

Rivers. The small rivers in the neighbourhood are branches of the Cauvery, with the exception of the Vennar, and are sufficient for the purposes of irrigation.

There are no mountains in the vicinity of Tanjore, but to the west and south the land rises considerably, and the face of the country becomes quite changed, the soil being gravelly, and dry grains only are grown, many parts are however quite uncultivated, and a considerable space is set apart by the Rajah, as a preserve for game, which is covered only by brush-wood; the soil at this part is highly impregnated with iron. The few tanks in the neighbourhood are generally well filled from the rivers; sluices being made to allow a free passage for the water. The country to the north and east is a continued flat, under rice cultivation, several miles in extent; the ryots depend upon the S. W. monsoon for the irrigation of the first crop of grain, water being conveyed for that purpose by branches from the Cauvery, by means of which the country is in a manner inundated, the N. E. monsoon supplying that requisite for the second crop.

There is no jungle within ten miles of Tanjore, the nearest being at Senjeputty to the west, and Poondy to the south east.

Water. Well water is that principally used by the inhabitants, being considered more wholesome than the water from the rivers or tanks; in many of the latter, it is quite red from the presence of iron, and unfit even for culinary purposes.

The people appear generally speaking, to enjoy excellent health, and to attain a great age; mild fevers both of a syno-

chus and intermittent character, occasionally come under notice, but they are subdued without difficulty, and are seldom complicated with organic disease; these complaints are most frequent during the prevalence of the north east monsoon, from exposure to cold winds.

Cholera has not been epidemic at Tanjore since 1831; before that time it occasionally appeared with great severity, and numbers fell victims to it; and no other disease of an epidemic character, has been known at this place, within the memory of the oldest inhabitant, and all bear testimony to the extreme salubrity of the place; it is held in such high reputation by the natives, as to be the resort of many, who having obtained a competency make choice of it as a favored spot, when they may spend the evening of their days. Animals are also healthy, none appearing to suffer from any thing like endemic maladies, and the native residents attribute this peculiar exemption from disease, both among themselves and the cattle, to the extreme purity of the water in the vincity of the town.

Food. Rice is the food principally in use among the natives, and its cultivation is so general in the district, and its price so much lower than elsewhere, that it is within the reach of all; some however of the poorer classes, in time of scarcity, make use of the grain called cumboo.

Trades. A great variety of trades are carried on at Tanjore, the principal of which are manufactures of silks, muslins and cottons.

The sepoys' barracks are placed on an open, dry and slightly elevated piece of ground, about a mile south-east of the fort. It consists of a building 30 feet in length, and 18 in breadth, substantially built of brick and chunam, and covered with tiles.

There is no public hospital at the station, but a part of the assistant surgeon's premises, consisting of two small rooms, is appropriated for that purpose, one room is used as a dispensary, and the other is occupied by the few sick sepoys of the native detachment stationed at Tanjore.

The following register shews the mean thermometric range for one year, commencing in March 1835.

Monthly mean of the Thermometer in the shade at Tanjore, from March 1835, *to February* 1836.

1835.	6 A. M.	12 M.	6 P. M.	REMARKS.
March.	$79\frac{1}{2}$	86 2-3rd	$85\frac{1}{3}$	No rain, the weather getting much warmer during the day, but the nights still pleasantly cool.
April.	82	86 2-3rd	$84\frac{1}{2}$	Unusually heavy rain about the beginning of the month, which cooled the air very much, and kept the hot weather off for some time.
May.	$87\frac{1}{3}$	$91\frac{1}{2}$	88	Much warmer than last month, but occasional showers of rain have fallen, and moderated the heat very much.
June.	87	90 2-3rd	89	Heavy rain at the commencement of the month; towards the end there were also some showers; wind occasionally from the S. W., but altogether the weather has been pleasant.
July.	82 2-3rd	$91\frac{1}{2}$	87	Cloudy and cool weather, occasionally showers.
August.	81	$88\frac{1}{3}$	87	Clear weather with heavy showers, and thunder storms
September.	$81\frac{1}{2}$	85	$84\frac{3}{4}$	Close and sultry evenings, days clear towards the end of the month, heavy showers and thunder.
October.	77	$84\frac{1}{2}$	$82\frac{1}{2}$	Clear days, nights cloudy, with slight rain.
November.	74 2-3rd	75	74	Clear days until 9th when rains began, nights rainy, usually wet, or heavy dews.
December.	72	75	74	Clear days, cloudy nights with rain.
1836.				
January.	71	77	76 2-3rd	Clear cool days, light dew no rain.
,, February.	74	83 2-3rd	82	Cloudy throughout the month, rain on the 12th, heavy dews.

COMBACONUM.

General description of the district.

The district of Combaconum, situated in the richest part of the Tanjore province, presents quite the appearance of a garden; the rivers Coleroon and Cauvery, with their branches, which intersect the country in all directions, contributing much both to its beauty and fertility. The district extends about 20 miles east and west; and 30 miles north and south; approaching in some parts, to within ten or fifteen miles of the sea. It forms a rich alluvial plain throughout its whole extent; paddy fields occupying by far the largest portion of the land, which is generally under cultivation about eight months in the year, and yields two crops of grain; the other parts of the country are under plantations of cocoanut and betel trees, plantains &c.; and dry grains, such as raggy, cholum and gram, are likewise partially cultivated.

Rivers and streams.

The rivers and streams which are very numerous, yield an abundance of water during six or eight months, from July, till January or February, the whole country then assuming a most verdant aspect. An annicut having been lately erected across the Coleroon, about 12 miles N. E. of the town of Combaconum, a considerable body of water has been made to pass from that river, into the Cauvery, whereby a sufficient supply is now available, to enable the ryots to carry on their cultivation, at all seasons of the year.

Climate.

For climate, see general description of Tanjore.

Exemption from disease.

No epidemic, or any other serious disease, has been known in this district for many years past; in 1819, cholera and small pox made considerable havoc amongst the natives, and occasional severe visitations of disease, are spoken of as having occurred previous to that

period. From May till October is the most healthy period of the year, as during the other months cases of cholera, small pox, fever, diarrhœa and dysentery, occur from time to time.

Vaccination its utility and effects.

Vaccination has been carefully kept up, two thirds at least of the children having undergone that operation, and for the last six or seven years, an anxious desire has been evinced by all classes of the natives, to have their families vaccinated, thus accounting for the comparative exemption from small pox.

Population villages &c.

There are said to be 400 villages within the range of this zillah, all amply supplied with tanks, and wells of good water. The population in 1826, amounted to about 95,000 souls; and in 1837, it had increased to 1,15,000, of these 58,400 were males, and 56,600 females.

The inhabitants live chiefly on rice, eaten with curry, fish, or butter milk, they also make use of mutton and fowls occasionally; they are industrious, sober and cleanly, and an excellent magisterial superintendence preserves as much order as can well be expected.

Combaconum.

The town of Combaconum, in which is situated the jail, hospital, and other public buildings, has several wide and airy streets, and extends about two miles in length, from N. to S., and one mile in breadth, from E. to W., being distant 30 miles from the sea; like the surrounding country it is extremely flat and low; the Cauvery and Asillar rivers approach close to the suburbs.

Distance from the sea.

Houses.

The houses are built in the usual native manner, and in some of the principal streets they have upper stories; the public bazaar forms a long and tolerably wide street, and is well stocked with provisions of all kinds; and being a place of extensive traffic, and of great resort for religious purposes, Combaconum is much frequented by strangers from all parts of southern India. The chief roads are,

Bazaar.

one from Madras, and another from the sea coast, which run through the town.

According to a census taken in 1826, the population of the town amounted to 24,900, viz. male adults 9,360, female adults 8,855, male children 3,750, female children 2,935, and in 1837, it was found to have increased to fully 30,000; there are 2,953 tiled, and 3,981 thatched houses in the town, most of these with upper stories, being of the former description.

There are several very celebrated pagodas at this place, and brahmins consequently form a large part of the community, they live entirely on the revenue derived from the pagodas. Weavers are also numerous, and a very industrious though poor class of the inhabitants. Ryots, and labourers make up the remainder of the population; and but few mendicants are to be seen.

The few Europeans located here, enjoy excellent health, their houses are on slightly elevated ground, and well situated.

Jail, Hospital &c.

The court house, a large commodious building, the jail, and hospital, distant from each other about one hundred yards, are erected on a sandy piece of ground near the river, being the most eligible site in the vicinity; the jail and hospital are contained within the same enclosure, being separated by a partition wall, which divides the prisoners' cells from the hospital, and sepoy's guard rooms; the space occupied by the hospital is 182 feet, by 78; and that by the cells 182 feet square, a communication exists between the two portions of the building, by means of a gate-way in the partition wall; the outer wall which surrounds the whole, is about 15 feet in height.

The hospital is substantially built, has a tiled roof, and brick flooring, and consists of five wards, one 36 feet by 16, the others 16 feet square; it is well ventilated by doors and

windows, but unprovided with verandahs; one of the apartments is used as a surgery and dispensary. Besides the guard room, a cooking shed and well, the civil prisoners' cells, the necessary, and a small building used for cleaning rice, are in the same enclosure with the hospital.

The division for convicted prisoners, and those waiting for trial, consists of nine cells, two cooking sheds, and two necessaries; the largest sized cells are about 30 feet in length, by 12 in breadth, the others average from 12 to 24 feet in length, and 12 in breadth, the whole being eight feet in height, they are well built, tiled, and have brick floors. There are five wells within the enclosure, which furnish an ample supply of good water at all seasons. Every attention is paid both to the cleanliness of the jail, and its inmates, but diseases of a severe character, such as fevers, diarrhœa and dysentery have of late prevailed, attributable to the crowded state of the building, there having been frequently from four to five hundred, confined in a space adapted to accommodate only about 300; and in 1837, they suffered from a severe visitation of small pox, which spread to a considerable extent, from the circumstance just mentioned.

Sepoys lines. The sepoys huts, about 70 or 80 in number, are situated immediately on the bank of the river, near the jail and court house; the men and their families, are generally very healthy.

One of the wards of the jail hospital is appropriated for the reception of sick sepoys. See appendix, under the head Tanjore, for table of disease.

The following tables No. 16 and 17, exhibit the nature and amount of disease and mortality, which have occurred amongst the inmates of the jail, during the ten years from 1829, to 1838, inclusive; they also exhibit the diseases classified, and point out the per centage of sick to strength, and of deaths to sick treated.

JAIL OF COMBACONUM.

No. 16—*Table exhibiting the Number of Admissions and Deaths of the Convicted Prisoners, from each class of Disease, for* 10 *years.*

CLASSES	DISEASES.	From 1829 to 1838. Aggregate strength 1,060. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average annual per centage of sick to strength.	Average annual per centage of deaths to sick.
Fevers......	Febris ephemera	8	0	2	0								
	,, intermit. quot	134	11	202	9								
	,, tertiaua......	10	1	2	0	170	12	244	13	414	25	39 ·056	6 ·053
	,, remitt........	9	0	21	3								
	,, continua.....	9	0	17	1								
	Cholera........	0	0	0	0	0	0	0	0	0	0	0 ·000	0 ·000
Diseases of the Abdominal viscera.	Diarrhœa......	124	23	173	23								
	Dysenteria acuta et chronica.	28	5	51	10	157	28	229	33	386	61	36 ·415	15 ·803
	Obstipatio......	5	0	5	0								
	Hepatitis acuta.	2	0	0	0	2	0	0	0	2	0	0 ·188	0 ·000
Diseases of the Lungs.	Catarrhus......	13	0	5	0								
	Asthma........	3	0	1	1	17	1	9	3	26	4	2 ·452	15 ·384
	Pneumonia.....	1	1	3	2								
	Dyspnœa.......	0	0	0	0								
Diseases of the Brain.	Apoplexia......	0	0	1	1								
	Epilepsia	0	0	3	1	1	1	10	3	11	4	1 ·037	36 ·363
	Paralysis.......	1	1	4	1								
	Mania..........	0	0	2	0								
Eruptive Fevers......	Variola.........	8	2	3	0								
	Varicella	19	0	33	0	27	2	36	0	63	2	5 ·943	3 ·174
	Erysipelas......	0	0	0	0								
Rheumatic affections.	Rheumat. acutus et chronicus..	42	1	39	2	42	1	39	2	81	3	7 ·641	3 ·703
Dropsies...	Anasarca.......	14	6	12	5	15	7	13	5	28	12	2 ·641	42 ·857
	Ascites	1	1	1	0								
Venereal affections ..	Syphilis primitiva..........	7	0	8	0	8	0	11	0	19	0	1 ·792	0 ·000
	Hernia humoralis..........	1	0	3	0								
Specific diseases.	Atrophia........	1	0	3	0								
	Lepra...........	0	0	2	1	8	0	6	1	14	1	1 ·320	7 ·142
	Dracunculus. ..	7	0	1	0								
Diseases of the eye.	Morbi oculorum.........	8	0	10	0	8	0	10	0	18	0	1 ·698	0 ·000
Diseases of the skin.	Morbi cutis....	64	2	40	0	64	2	40	0	104	2	9 ·811	1 ·923
	Other diseases..	351	5	339	4	351	5	339	4	690	9	65 ·094	1 ·304
	Total....	870	59	986	64	870	59	986	64	1856	123	175 ·094	6 ·630

JAIL OF COMBACONUM.

No. 17—Table exhibiting the number of admissions and deaths of the Prisoners under Trial, from each class of disease, for 10 *years.*

CLASSES	DISEASES.	From 1829 to 1838. Aggregate strength 2,418. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class.	Total Deaths from each class.	Average percentage of sick to strength.	Average per centage of deaths to sick.
Fevers......	Febris ephemera	0	0	7	0	111	13	166	7	277	20	11 ·455	7 ·220
	,, intermit. quot	57	10	139	7								
	,, tertian.......	9	0	2	0								
	,, remittens....	8	3	15	0								
	,, continua.....	1	0	3	0								
	Cholera.........	3	3	3	1	3	3	3	1	6	4	0 ·248	66 ·666
Diseases of the Abdominal viscera......	Diarrhœa..	88	19	150	24	106	22	216	32	322	54	13 ·317	16 ·363
	Dysenteria acuta et chronica.	12	3	62	8								
	Obstipatio......	6	0	4	0								
	Hepatitis.......	1	1	0	0	1	1	0	0	1	1	0 ·041	100 ·000
Diseases of the Lungs	Pneumonia......	3	1	1	1	3	1	2	2	5	3	0 ·206	60 ·000
	Dyspnœa	0	0	1	1								
Do. Brain..	Epilepsia	0	0	2	0	6	0	6	0	12	0	0 ·496	0 ·000
	Mania..........	6	0	4	0								
Eruptive fevers.......	Variola	30	8	11	5	57	8	45	5	102	13	4 ·218	12 ·745
	Varicella........	26	0	34	0								
	Erysipelas......	1	0	0	0								
Dropsy.....	Anasarca..... ..	11	2	11	4	11	2	11	4	22	6	0 ·909	27 ·272
Rheumatic affections.	Rheumat. acut. et chronicus..	42	2	23	0	42	2	23	0	65	2	2 ·688	3 ·076
Venereal affections..	Syphilis Primitiva..........	12	0	5	0	17	1	7	0	24	1	0 ·992	4 ·166
	,, consecutiva..	1	1	0	0								
	Gonorrhœa	2	0	2	0								
	Hernia humoralis............	2	0	0	0								
Specific diseases.....	Atrophia..,....	1	1	4	1	20	2	7	1	27	3	1 ·116	11 ·111
	Lepra..........	2	1	0	0								
	Dracunculus. ..	17	0	3	0								
Diseases of the eye ..	Morbi oculorum..........	3	0	10	1	3	0	10	1	13	1	0 ·537	7 ·692
Do. skin..	Morbi cutis....	59	1	43	0	59	1	43	0	102	1	4 ·218	0 ·980
	Other diseases .	136	1	179	4	136	1	179	4	315	5	13 ·027	1 ·587
	Total....	575	57	718	57	575	57	718	57	1293	114	53 ·478	8 ·762

Remarks on the preceding tables

The average annual strength of the convicts, during the ten years, has been 106, and the admissions into hospital, have amounted to 185, or 175 per cent; the average annual number of deaths has been 12, or 11·603 per cent, on the strength; the total number of admissions, having been 1856, of deaths 123, and, the aggregate strength 1,060.

The prisoners waiting for trial have been more numerous, the aggregate strength amounting to 2,418; the admissions into hospital, have been 1,293, or 53·478 per cent, and the number of deaths 114, or 4·714 per cent, on the strength.

The most numerous admissions amongst both classes of prisoners, have been from *fevers, bowel complaints, eruptive diseases, rheumatic affections and dropsies;* and the greatest mortality has been produced by the same diseases.

In the following table No. 18, are exhibited the annual admissions and deaths, from five of the principal diseases, viz. fever, cholera, diarrhœa, dysentery and anasarca; the total sick treated and mortality are also given for the purpose of shewing the great proportion of the whole mortality occasioned by these diseases; amounting to no less than 181, out of 237, or very nearly 3-4ths.

		1829.		1830.		1831.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		Total.	
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad,	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad	Dd.		
Convicts.	Fever	36	2	16	0	32	0	26	0	44	4	73	9	49	3	21	0	66	3	51	4	414	25
	Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Diarrhœa	15	1	8	0	19	2	11	0	46	3	46	6	58	18	13	3	56	8	25	5	297	46
	Dysenteria	0	0	0	0	0	0	2	1	7	0	19	4	26	6	6	2	9	1	10	1	79	15
	Anasarca	1	0	0	0	1	1	2	0	3	1	9	3	3	2	3	2	3	2	1	0	26	11
	Admissions and deaths from these diseases	52	3	24	0	52	3	41	1	100	8	147	22	136	29	43	7	134	14	87	10	816	97
	Total admissions and deaths	149	4	133	3	118	3	103	1	178	11	280	29	245	30	119	7	395	18	136	17	1856	123
	Strength each year	128		88		74		74		101		100		138		96		155		101			
Prisoners under Trial.	Fever	14	2	17	1	14	0	17	1	43	2	47	3	35	3	13	1	30	1	47	6	277	20
	Cholera	0	0	0	0	0	0	0	0	0	0	2	1	1	1	0	0	2	1	1	1	6	4
	Diarrhœa	1	0	3	1	19	0	28	3	51	4	39	9	28	6	14	2	27	9	28	9	238	43
	Dysenteria	0	0	0	0	0	0	1	1	2	1	20	3	12	2	4	1	5	2	30	1	74	11
	Anasarca	0	0	0	0	4	0	2	0	2	1	4	1	6	3	0	0	4	1	0	0	22	6
	Admissions and deaths from these diseases	15	2	20	2	37	0	48	5	98	8	112	17	82	15	31	4	68	14	106	17	617	84
	Total admissions and deaths	42	3	64	4	80	0	86	5	195	10	202	18	153	15	83	*11	167	†24	216	24	1293	114
	TotalStrength each year	232		204		160		142		266		334		249		233		363		236			
	Admissions and deaths amongst both classes of prisoners	191	7	197	7	198	3	189	6	373	21	482	47	398	45	207	18	562	42	352	41	3149	237
	TotalStrength each year	360		292		234		216		367		434		387		329		518		340		ag: str. 3178	
	Per centage of deaths to strength	1	·944	2	·397	1	·282	2	·777	5	·722	10	·829	11	·628	5.	471	8	·108	12	·058	6	·239
	Per centage of sick to strength	53	·055	67	·465	84	·615	87	·500	101	·634	111	·059	102	·844	62	·918	108	·494	103	·529	90	·540

* 5 from Variola.
† 7 from Variola.

The marked increase of mortality in this Jail from the year 1833, will not fail to be observed; it has been occasioned chiefly by bowel complaints and dropsy; indeed during the last six years, the maladies whence the increased number of deaths has proceeded, may be considered diseases of debility, for febrile and other complaints of an acute form, although assuming a sthenic character at the outset, have rapidly and almost invariably in those cases where death ensued, declined in their progress, into one or other of the two forms of disease above mentioned.

The principal exciting cause of this increase of sickness and mortality, in the opinion of the executive medical officer, and also of the superintending surgeon, has been the over-crowded and badly ventilated state of the cells;—and as will be seen, in 1836, (table No. 18) a considerable amelioration took place, after the removal in the previous year, of one hundred prisoners from the jail; and the annual per centage of deaths to strength, will likewise be found to corroborate this opinion.

The character of these diseases has been very similar to those already described as prevailing in the Madura and other jails in the division, nor has the treatment differed.

It is worthy of observation that the inmates of this jail have almost completely escaped from attacks of cholera, though the disease prevailed in the district in 1829 and 1833.

Amongst the class "other diseases", ulcers form the greater proportion, as in other jails; and previous to 1838 owing to the confined and ill ventilated state of the hospital, they frequently assumed a malignant character; and this condition of the hospital is reported by the medical officer, to have exerted an equally pernicious effect on other complaints.

Two of the deaths, under the head "other diseases", were the result of wounds; in 1830 ten men attempted to escape, two were cut down, and the other eight severely wounded by the peons; no less than sixty wounds having been inflicted on these ten men!

NEGAPATAM.

Description of the Town of Negapatam.

The town of Negapatam which is situated on the coast, in 10° 45″ North latitude, and 79° 55″ East longitude, stands on an open, level, sandy piece of ground, having a gentle slope to the sea, above which it is elevated about 3 or 4 feet. It is of considerable extent, being built in a straggling manner; and is estimated to contain a population of 10,000 souls; a large proportion of these, are the descendants of the original Dutch and Portuguese colonists, by whom this place was formerly occupied; the remainder is made up of hindoos, musselmauns and brahmins, but of these the hindoos constitute by far the largest proportion. Three principal streets or thorough-fares, which are wide, open and airy, intersect the town, two of them run parallel to each other, one at the east, and the other at the west end, being connected by the third nearly in the centre, from these all the others branch off, and are nothing better than narrow, confined lanes, more particularly in the part occupied by the Portuguese.

Bazaar.

The bazaar consists of four streets at the south east side, where various kinds of grains, vegetables, piece goods, country medicines &c., are exposed for sale.

The country immediately surrounding the town is open and level, and a short distance to the southward there is an uncultivated waste, which is covered with sea water during the monsoon.

Drainage.

From the slope however, towards the sea, there are no stagnant pools in or about the town, and a large drain running to the beach carries off all superfluous water.

Houses.

The houses are generally large, and built of brick with mud or chunam, and roofed with tiles; those of the more respectable natives are clean, and well ventilated; they are usually quadrangular buildings, consisting of two

eompartments, having outer and an inner courts, with verandahs round the inner sides; the outer court serves as a kind of anti-room to the inner one, which is the "sanctum sanctorum," where the families chiefly reside, and into which strangers are seldom permitted to enter. The houses occupied by the European residents, and respectable Dutch, and Portuguese inhabitants, are in an open and airy situation, to the westward of the town, facing the esplanade, which intervenes between them and the sea. The ruins of the old Dutch fort, are still to be seen surrounded by a ditch, which is however filled up in most places, it had long been a receptacle for stagnant water, and other putrescent matters, the exhalations from which were considered highly injurious to the health of the inhabitants; besides having been an intolerable public nuisanee.

Back-water. Immediately to the south of the town a backwater is formed, where the Valanganeg river empties itself into the sea, it is capable of admitting vessels drawing little water, such as dhonies and mussoolah boats &c., and small country craft resort to it for shelter during the boisterous weather of the monsoon; near its mouth, a long bar of sand running to a point, divides the back-water from the sea, over which the surf in stormy weather breaks with great violence.

Roads. The roads in the immediate neighbourhood of Negapatam are in very good order, having of late undergone great improvements, most of them are shaded by rows of trees on either side. A new road has recently been made to the westward, leading to Tanjore, which commences to the north of the town, it is considerably elevated above the marshy ground through which it runs, and substantial bridges have been thrown across an arm of the back-water, and some small nullahs which lay in its course; it affords a more direct line of communication, between the seaport town of Nagore, and Tanjore, than that through Negapatam, cutting off a considerable angle, which conveyances were formerly obliged to traverse by passing through the town.

Salubrity of the Station.

The station is remarkably healthy, and free from diseases of miasmatic origin, a circumstance which might not, *a priori* be expected, from the marshy nature of the country to the southward; the marshy grounds being however open and exposed to the winds from every quarter, no accumulation or concentration of such exhalations as may arise from it, can take place; and this appears to account for the immunity from disease, enjoyed by the inhabitants. Intermittent fever is of rare occurrence, and the commencement of the monsoon seems to be the only unhealthy period, as the natives then suffer from dysenteric affections, fevers of an ephemeral type, catarrhs, and other diseases caused by obstructed perspiration. The fevers generally yield readily to emetics, purgatives and antimonials, but they occasionally assume a continued form, and sometimes prove fatal; severe cases occur principally among the convicts, and are attributable, to their working in irons, exposed to the sun, and to sudden transitions from heat to cold, at particular seasons of the year. A custom exists of firing the chests of children between the ages of four, and eight years, six or eight round cicatrices being observable on the breast of every child, after attaining its eighth year. Anasarcous diseases, psora and venereal, are frequent. The native hakeems have no systematic method of treating diseases; in fevers the medicines used are stimulants, such as aromatic tonics, cloves and ginger; in dysentery decoction of cloves, and pomegranate bark are administered, and have been found useful in the chronic forms of the disease.

Diseases intermittent fever &c.

Fevers severe amongst convicts.

Firing the breasts of children.

Anasarca, psora venereal.

Native treatment of disease.

Manufactures, &c.

The inhabitants are generally industrious, and fond of commercial pursuits; they traffic in rice, coffee, and other articles imported from Ceylon, and the islands to the eastward. There are no manufactures of any great extent at Negapatam, but cotton and silk cloths are wove; and cocoanut, gingelie, and lamp oils which are here very cheap, are made in considerable quantities; ship build-

Ship building & rope making. ing, and the manufacture of coir ropes are likewise carried on, but not extensively.

Sepoy Barracks. The barracks for the sepoys, (a small detachment of native troops being stationed here) is an old Dutch dwelling house, situated to the north west of the esplanade, on a dry, sandy piece of ground, well sheltered and having a garden in front enclosed by a low wall; it is built of brick and mud, has a tiled roof, and consists of three apartments, (a centre and two side rooms), with a long verandah in front; the former is that used by the sepoys, of whom about fifteen only are on guard at one time; such as have families reside in the town, so that few, except the guard, remain in the barracks at night. The principal room is 40 feet in length, by 19 in breadth, having a door and two windows in front, with another door, leading into a back verandah, there is a small yard in the rear, surrounded by out-offices, and a high wall; the house is dry, and free from any causes likely to produce disease.

Hospital. The hospital for the detachment, is in a healthy airy situation, facing the sea, from which it is distant about two hundred yards; in its front is a long cultivated slip of garden ground, surrounded by a low wall; the building is composed of three rooms, the centre in which the sick are accommodated, is 45 feet in length, by 14 in breadth, being well ventilated, and lighted by a door, and two windows in front; the other two rooms are used as a dispensary, and for stores; it is built of brick and mud, and roofed with cadjans; a necessary and cookroom are attached to it, and the whole of the premises are in good repair, and capable of accommodating thirty patients. For table of diseases, see appendix, under the head Tanjore.

The jail is spacious, lofty and commodious, built of brick and chunam, and covered with tiles. It is an old family residence, situated on a slight eminence, with its front to the sea, from which it is distant about 50 yards.

It consists of one large hall in the centre, 50 feet by 40, and ten other rooms of various dimensions, each 30 feet in height, all well ventilated, and several of them having sky-lights.

The verandah in front is 62 feet long and 16 feet broad, that on either side and in the rear, is of less breadth, but it is enclosed and partitioned off for cook rooms. The jail is calculated to accommodate 250 prisoners.

The hospital is situated behind the jail and within the same enclosure; it is equally substantially built, but not so well ventilated as the apartments of the jail. It is capable of containing 30 patients. See table at the end of this report for diet, clothing, labour, &c.

Previous to 1834, no medical returns were furnished from this jail, the usual tables of disease cannot therefore be given. The sickness and mortality however, which have occurred amongst the prisoners, from that year, to 1841 inclusive, are exhibited in the following table No. 19, with the per centage of sick to strength, and of deaths to sick treated.

The admissions into hospital are few in number, compared with other jails in the division, but the per centage of deaths is great, not only with respect to the sick treated, but also to the strength; amounting to 10·357 on the admissions, and 4·179 on the strength.

This however, will not be wondered at, when it is considered that the prisoners at this station, consist exclusively of convicts who have been transferred from other jails, many of whom are reported to have arrived in an advanced stage of disease, especially those from Combaconum.

It is considered to be by far the most healthy jail in the division, and this can only be ascribed to its locality, and to the ample airy room afforded to its inmates, for with regard to diet, clothing, labour and exposure out of doors, all prisoners are placed in pretty equal circumstances.

JAIL OF NEGAPATAM.

No. 19—*Table exhibiting the Number of Admissions and Deaths of the Convicted Prisoners, from each class of Disease, from* 1834 *to* 1841 *inclusive.*

CLASSES	DISEASES.	1834 to 1841 inclusive. Aggregate strength 1361. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	Dd.	2nd Half. Ad.	Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers......	Febris ephemera	53	0	101	0	70	5	119	4	189	9	14 ·361	4 ·761
	,, intermit. quot	10	2	9	1								
	,, remittens....	7	3	0	0								
	,, com. continua..........	0	0	9	3								
	Cholera........	1	0	7	1	1	0	7	1	8	1	0 ·607	12 ·500
Diseases of the Abdominal viscera.	Diarrhœa.......	6	1	9	2	36	3	42	9	78	12	5 ·927	15 ·384
	Dysenteria acuta et chroniea.	10	2	6	4								
	Colica..........	3	0	3	0								
	Obstipatio......	16	0	22	1								
	Dyspepsia......	1	0	2	2								
	Hepatitis.......	1	1	0	0	1	1	0	0	1	1	0 ·076	100 ·000
Diseases of the Lungs.	Catarrhus......	3	0	9	0	8	4	16	5	24	9	1 ·823	37 ·500
	Asthma........	1	0	1	1								
	Phthisis pulmonalis.........	2	2	5	3								
	Pneumonia.....	2	2	1	1								
Diseases of the Brain.	Epilepsia.......	1	1	0	0	5	5	4	3	9	8	0 ·683	88 ·888
	Paralysis.......	2	2	4	3								
	Phrenitis.......	1	1	0	0								
	Mania..........	1	1	0	0								
Eruptive Fevers......	Variola.........	0	0	1	0	13	0	1	0	14	0	1 ·063	0 ·000
	Varicella.......	13	0	0	0								
Dropsies...	Anasarca.......	6	3	4	3	8	5	5	4	13	9	0 ·987	69 ·230
	Ascites.........	1	1	0	0								
	Hydrothorax....	1	1	1	1								
Rheumatic affections.	Rheumat. acutus et chronicus..	6	0	2	0	6	0	2	0	8	0	0 ·607	0 ·000
Specific diseases.	Atrophia........	5	2	3	0	6	2	6	1	12	3	0 ·911	25 ·000
	Lepra..........	0	0	1	1								
	Dracunculus. ..	1	0	2	0								
Diseases of the eye.	Morbi oculorum.........	1	0	3	0	1	0	3	0	4	0	0 ·303	0 ·000
Diseases of the skin.	Morbi cutis....	13	0	10	0	13	0	10	0	23	0	1 ·747	0 ·000
	Other diseases..	91	2	57	1	91	2	57	1	148	*3	11 ·246	2 ·027
	Total....	259	27	272	28	259	27	272	28	531	55	40 ·319	10 ·357

* Two of these were from wounds inflicted by the peons, when several prisoners attempted to escape from the jail in 1837.

DISTRICT OF TRICHINOPOLY.

General description of the Collectorate.

This Collectorate includes an area of 3,000 square miles, and is divided into eight Talooks, viz. Conand, Lalgoody, Arialoor, Woodiarpallum, Mooserg, Tooriore, Valcondapoorum and Vetticutty. The population is estimated at 567,976 souls. It is bounded on the south east by the Coleroon river; on the south partly by the Tondiman Rajah's country, and partly by Madura; on the west by Coimbatore; on the north west by Salem; and on the north and east by south Arcot. It may be described as an extensive plain, with here and there an isolated rocky mountain of granite, rising abruptly from the surface.

The river Cauvery flows through the centre of the district, and a little above Trichinopoly divides into two branches—the southern retains its original name (of Cauvery)—and the other assumes that of Coleroon—numerous small streams are given off from them forming a rich and extensive *delta*, lying between Porto-Novo and Negapatam, on the coast.

The rivers in this district derive their chief supply of water from the western mountains, and the mountains of Mysore; shortly after the south-west monsoon sets in, they become filled from bank to bank—and the water is drawn off in every direction for the cultivation of the country, by artificial cuts, sluices, &c., the whole country being nearly under water by the end of May, from which time until March a constant supply is available, thus enabling the farmers, to carry on cultivation for fully three-fourths of the year—and to raise two, and sometimes three crops of rice annually.

To the southward of the station of Trichinopoly however, the ground is high and comparatively barren, from not being capable of irrigation from the rivers, and with this exception the cantonment is immediately surrounded by rice lands, several square miles in extent.

Station of Trichinopoly.

Trichinopoly the principal station, and head quarters of the troops, composing this division of the army, is situated in North latitude 10° 50′, and East longitude 78° 44′, on the south bank of the river Cauvery; distant from the sea about 85 miles, and about 207 miles S. S. W from Madras.

The station is bounded on the north and east, by the river Cauvery, and on the south and west by an extensive open plain, interspersed with numerous insulated masses of granite rock, and to the westward the country is well wooded, and highly cultivated.

Climate.

A steady high temperature, cloudless sky, a dry close and sultry atmosphere, with much glare, and intense radiation of heat, are the characteristics of the climate of Trichinopoly. The heat, drought and glare, are often very intense for months together; the hot weather is however a good deal broken and varied, by high westerly winds; and whirlwinds often accompanied by clouds of sand and dust, recur at short intervals often for a week or two at a time. The high winds and dusty weather which chiefly prevail during May, June, and July, render these months the most disagreeable part of the year, the atmosphere being obscured during the day by the clouds of dust. The monsoons are not well marked, unless by a change in the direction of the wind.

The climate of this part of the southern division, may with tolerable accuracy be divided into three seasons; viz. the hot and dry, the hot and windy, and the cool and showery, or more simply into eight months hot and dry, and four showery. March, April and May are always exceedingly sultry, with much thunder and lightning, and occasionally heavy thunder showers occur; but from 9 A. M., until 4 P. M. it is always disagreeably hot. June and July are also hot, although in a less degree, the heat being generally at its maximum about the middle of May. When the westerly wind sets in, the heat is moderated, but when accompanied by dust it is, as already remarked, particularly unpleasant. Thunder showers occasi-

onally occur during a week or two, in the months of August, September, October and November, which are cool, cloudy, and pleasant. December, January and the greater part of February, are dry, cold in the mornings and evenings, but sultry and close during the forenoon. Fogs and dews are rarely known in the months of March, April and May, when the surrounding country presents the appearance of a vast desert. The rivers and tanks become dried up; the trees shed their leaves, and vegetation is completely at a stand; the respiration of animals at this time is panting and oppressed, in short all nature, both vegetable and animal, seems to droop, and shrink from the raging mid-day heat. When the rains succeed nature soon revives, and vegetation bursts forth with new life and vigour, and the eye is relieved from the oppressive glare and barrenness.

The soil being so arid and sandy, there are scarcely any fogs, vapours or noxious exhalations and in this respect the climate is salubrious, the atmosphere being seldom damp or humid.

Annual fall of rain. The mean annual fall of rain does not exceed 30 or 40 inches, and is often considerably less.

The mean annual temperature of Trichinopoly, as ascertained by accurate observation, is about 85½°, the greatest heat observed being 102° in the shade, the lowest 68°. When exposed to the sun the thermometer frequently rises to 140°. The winds from October to May, are from the east and north. From May to October they become variable, but are generally from the west, south-west or south, and also sometimes northwesterly. The changes of the wind are generally very regular, at the stated periods which mark the two monsoons.

Geology, Soil &c. The soil on all the high ground around Trichinopoly is rocky, sandy or gravelly, generally of but little depth, and is barren and uncultivated. The rocks are either distinctly stratified, with rounded summits, or are disposed in large detached tabular masses. The strata or layers of rock, have generally a dip and declination to the south-west, west, or north-west, at angles varying from 25° to 30°, and seldom

rise to any great height above the level of the country. There are several large beds of stratified rock immediately to the south-west of the cantonment, between the European and artillery barracks, on which the solitary cells, or congee houses for Europeans are built. Besides *the rock* of Trichinopoly, there are several other large rocks in the neighbourhood, of similar character and appearance, rising abruptly in large masses of irregular shape, to a considerable height.

The predominating or largest rocks, seems to be generally speaking, what would be called by geologists, secondary or transition granite, the lower rocks being secondary trap and greenstone.

The granite has externally a dark or dull earthy colour, internally it is variegated, and contains a large proportion of felspar, with some quartz and mica. It is a hard and very durable stone, forming an excellent building material; quarries of it are worked by natives. It is hewn out into pillars, and steps for staircases, and the walls of the fort and gateways are built of it. The sand of the rivers consists of fine quartz and felspar, interspersed with numerous small shining scales of mica, which sparkle and glitter like gold leaf, and is sometimes mistaken for gold dust; from the red colour which many of the rocks assume externally, it is probable that they contain a considerable proportion of iron-ore. No ores however are wrought, nor are there mines of any kind nearer than Salem, where the iron-ore is of excellent quality.

On all the low ground, and near the banks of the rivers, the soil is rich and remarkably productive. In many places near the fort, as already noticed, where it has been long under cultivation, it is a deep and black loam, and yields three crops annually.

Wherever there is a sufficient supply of water, the land is under rice cultivation, which extends for many miles along the banks of the rivers. The soil in the low grounds has generally a bottom of deep, stiff and tenacious red coloured clay, with

an intermixture of sand, from which excellent bricks and tiles are made.

Produce. The chief produce of the soil are rice, cocoanuts, (cultivated chiefly for the oil) plantains, cholum, raggee, and various kinds of grain, tobacco is also cultivated to a great extent, in the neighbourhood, and cheroots form one of the principal exports; sugar-cane is but little grown. Every thing in husbandry depends on irrigation, manure being very little used.

There are some very good gardens around Trichinopoly, excellent graft mangoes, grapes, pine-apples, custard apples, limes, oranges, and water-melons, and a variety of other kinds of fruit produced, are peculiarly grateful during the hot season.

Manufactures. The natives of Trichinopoly have long been famed for their skill in the manufacture of hard ware, cutlery, and jewellery. Their harness and saddlery are also excellent, both as to workmanship and materials, and very moderate in price; and large quantities of cheroots are manufactured from tobacco of superior quality, grown in the neighbouring districts.

Habits. The people are an active, intelligent and industrious race; but those of low caste have the character of being addicted to thieving; arrack and other intoxicating liquors are much used by them, and they likewise smoke bhang. An ancient and strange custom exists, of employing a "Khoucurrah" or thief catcher, who acts as a kind of sentinel during the night, for the protection of houses and property; these persons are generally attached to the compound and house, as a matter of necessity rather than of choice, and the continuance of the custom to the present time would seem to convey no very favourable idea of the efficiency of the police establishment. Khoucurras are said to have been formerly the dependants of a neighbouring rajah; the noise they make, by shouting and challenging during the night, is exceedingly unpleasant, and disturbs the repose of strangers.

Insects, reptiles &c.

The dry ground, as in other parts of India is infested with myriads of white, black and red ants, and other destructive insects, which commit great ravages both in the fields, and in houses; water snakes are very common in the paddy fields; scorpions, and the *cobra-de-manille* are frequently found in houses; the *cobra-de-cappella* is also occasionally met with. Common striped squirrels are very numerous, noisy, and troublesome, they frequent the roofs of houses, and are also destructive to fruit. Frogs swarm in the pools and tanks after heavy showers, and fill the air at night, with loud and incessant croacking; eye flies and musquitoes abound, especially after rain.

Water.

The water is of excellent quality, and abundant in quantity, being derived either from the Cauvery or its artificial branches, or from wells which have been dug in almost every compound. Its purity is owing to the beds of clay and sand, through which it percolates.

Fort.

The Fort, which includes the old town of Trichinopoly, is about two or three furlongs from the S. W. bank of the river Cauvery at the nearest point, and is a place of great antiquity. The flag-staff is placed on the summit of a rock of granite,rising to a height of about 500 feet, called the "Rock of Trichinopoly," which forms a conspicuous and imposing object, seen from a great distance in every direction; the view of the rock from the west, being not unlike that of Edinburgh castle in miniature. There is easy access from the south side, to the flag-staff by means of a spacious flight of stone steps, which about half way up passes through the site of an old magazine, accidentally blown up in the year 1772. This elevated spot commands a most extensive and varied view of the surrounding country, including the island of Seringham with its numerous pagodas, and the serpentine meanderings of the Cauvery and Coleroon rivers. In the distance, on the north and west, are seen the Shervaroy and Salem mountains, which divide the Carnatic from the Mysore country; on the east, south, and S. W. the perspective is exten-

sive, and beautifully diversified by alternations of hill and dale, wood and stream, champaign country and cultivated fields.

The fort of Trichinopoly with its strong and massy walls built of solid masonry, which are in general still in a good state of repair, though in some places rather dilapidated, bears the appearance of having been strongly and regularly built. The walls are in some places double, and from 20 to 30 feet in height, of very considerable thickness, and upwards of two miles in circumference. Within them is a very extensive pettah, or native town, with a population of nearly 30,000 souls; the houses and huts, are generally of the ordinary Indian construction, being low, narrow and very closely huddled together, having small pandals in front of them. As in other native towns the huts are without windows, and almost all present to a European eye, the appearance of being filthy, dark and ill-ventilated; and an air of discomfort pervades the whole. The houses are however arranged in tolerably straight, wide and regular streets, which are usually crowded at all hours of the day, with multitudes of passengers, bullock bandies and cattle; most of the streets having bazaars or shops for the sale of native manufactures, and commodities of every description.

The *Pay office, Arsenal, Garrison Hospital,* and the *Commissariat, Ordnance* and *Medical stores,* are situated within the fort, in the vicinity of the main guard; as is also the *Jail,* capable of containing about 320 prisoners.

It has been observed from the crowded streets, numerous buildings, and the proximity to the rock, that the temperature of the fort is generally higher than that of the immediate neighbourhood or cantonment. Populous villages surround the fort in every direction.

The country for some miles round, especially to the south west and west, is exceedingly fertile, and in a high state of cultivation, being interspersed with numerous cocoanut topes, and gardens well stocked with fruit trees, and vegetables of

various kinds. The soil in many places is a rich black loam, producing excellent crops of rice, tobacco and various kinds of grain.

The jail which was erected in 1806, is placed in a confined situation near the east end of the fort, close to the rampart. It is 168 feet in length from east to west, and 124 in breadth from north to south. Additional buildings were erected in 1832, consisting of workshops, where cotton cloths, cumblies and paper are manufactured. The jail contains twelve sleeping cells, 20 feet by 14, each capable of accommodating about 20 prisoners. There are also eight cells for condemned prisoners, each 8 feet by 6, and two separate apartments for debtors and security prisoners. The whole building can accommodate about 320 prisoners.

The ventilation is very imperfect not only from the site, but also from the construction of the jail, the twelve cells being placed in two double rows.

The hospital is within the same enclosure as the jail, and though somewhat enlarged in 1832, it is still found to be deficient in accommodation and defective in construction ; it is adapted for about 25 patients.

The diet, clothing, hours of labour &c. of the prisoners are given in the general statement annexed to the report of this division.

In the following table are shewn, the nature of the diseases and amount of mortality, which have occurred amongst the inmates during a period of ten years, from 1829 to 1838 ; it also exhibits the diseases classified, and points out the percentage of sick to strength, and of deaths to sick treated.

JAIL OF TRICHINOPOLY.

No. 20—Table exhibiting the number of Admissions and Deaths of the Convicted Prisoners, from each class of disease, for 10 years.

CLASSES	DISEASES.	From 1829 to 1838. Aggregate strength 2838. 1st Half. Ad.	Dd.	2nd Half. Ad.	Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	Dd.	2nd Half. Ad.	Dd.	Total admissions from each class.	Total Deaths from each class.	Average percentage of sick to strength.	Average percentage of deaths to sick.
Fevers......	Febris ephemera	104	1	83	0								
	,, intermit. quot	202	8	304	3								
	,, tertian.......	9	0	21	0	389	23	472	6	861	29	30 ·392	3 ·368
	,, remittens....	40	9	40	3								
	,, continua.....	34	5	24	0								
	Cholera.........	25	7	24	5	25	7	24	5	49	12	1 ·729	24 ·489
Diseases of the Abdominal viscera......	Diarrhœa..	260	27	280	32								
	Dysenteria acuta et chronica.	66	4	79	17	333	32	370	49	703	81	24 ·814	11 ·522
	Obstipatio......	7	1	11	0								
	Hepatitis acuta et chronica...	1	0	0	0	1	0	0	0	1	0	0 ·035	0 ·000
Diseases of the Lungs	Catarrhus.......	7	2	16	3								
	Asthma........	3	0	0	0	25	2	26	3	51	5	1 ·800	9 ·803
	Pneumonia.....	14	0	10	0								
	Hœmoptysis. ..	1	0	0	0								
Do. Brain..	Epilepsia	1	1	0	0	1	1	1	0	2	1	0 ·070	50 ·000
	Paralysis..	0	0	1	0								
Eruptive fevers..	Variola	8	5	0	0								
	Varicella........	6	0	55	1	17	5	67	1	84	6	2 ·965	7 ·142
	Rubeola...... ..	3	0	10	0								
	Erysipelas......	0	0	2	0								
Dropsy.....	Anasarca.... ..	16	4	17	7	16	4	17	7	33	11	1 ·164	33 ·333
Rheumatic affections.	Rheumat. acut. et chronicus..	106	3	103	3	106	3	103	3	209	6	7 ·377	2 ·870
Venereal affections..	Syphilis primitiva..........	1	0	1	0								
	Gonorrhœa	1	0	0	0	6	0	3	0	9	0	0 ·317	0 ·000
	Hernia humoralis............	4	0	2	0								
Specific diseases.....	Atrophia.., ...	52	9	68	18								
	Lepra..........	2	1	1	0	62	11	70	19	132	30	4 ·659	22 ·727
	Dracunculus. ..	5	0	0	0								
	Scrophula.	3	1	1	1								
Diseases of the eye ..	Morbi oculorum..	21	0	20	0	21	0	20	0	41	0	1 ·447	0 ·000
Do. skin..	Morbi cutis....	76	0	33	0	76	0	33	0	109	0	3 ·847	0 ·000
	Other diseases .	846	12	620	4	846	12	620	4	1466	16	51 ·747	1 ·091
	Total....	1924	100	1826	97	1924	100	1826	97	3750	197	132 ·368	5 ·253

The average annual numerical strength of the convicts has been 283, and the admissions into hospital 375, or 132·368 per cent. on the strength; the average number of deaths yearly has been nearly 20, or 6·955 per cent. on the strength.

The most numerous admissions have been from *fever*, *bowel complaints*, and *rheumatism*; and the greatest mortality has been occasioned by *bowel complaints*, especially *diarrhœa*, *fever*, and *atrophy* in the class of "*specific diseases*," *cholera* and *anasarca*, as the following table will shew, in which is given the admissions and deaths from these diseases each year, as also the total sick treated and mortality.

Table No. 21.—Jail of Trichinopoly.

	1829.		1830.		1831.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		Total.	
	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Fever........	26	3	26	2	24	3	45	1	128	3	102	3	170	4	70	1	222	4	48	5	861	29
Cholera........	1	1	0	0	1	0	0	0	26	2	1	0	0	0	3	1	9	3	8	5	49	12
Diarrhœa........	43	1	30	3	64	18	30	2	66	3	64	7	79	7	29	2	107	9	30	7	540	59
Dysenteria........	1	0	10	4	2	0	6	0	80	9	11	1	11	2	9	1	13	2	2	2	145	21
Anasarca........	1	0	0	0	7	2	3	2	2	1	7	1	3	1	2	1	5	2	3	1	33	11
Atrophia........	10	0	16	1	53	12	14	7	18	4	2	1	3	2	0	0	1	0	3	0	120	27
Admissions and deaths from these diseases...	82	5	82	10	151	35	98	12	320	22	185	13	265	16	113	6	357	20	94	20	1748	159
Total admissions and deaths........	224	6	201	12	258	36	281	14	553	29	511	19	604	19	256	13	702	25	160	24	3750	197
Strength each year.....	240		220		311		263		313		332		362		300		332		160		2833	
Per centage of deaths to strength........	2 ·500		5 ·000		11 ·575		5 ·323		9 ·265		5 ·722		5 ·248		4 ·333		7 ·530		15 ·000		6 ·953	
Per centage of sick to strength........	93 ·333		91 ·363		82 ·958		106 ·844		176 ·677		153 ·915		166 ·850		85 ·333		211 ·445		100 ·000		132 ·368	

Thus it will be observed, that in this jail as in those already described, bowel complaints have caused the greatest amount of mortality; and in the opinion of the medical officers in charge, the badly ventilated state of the building has been the principal exciting cause of these affections. A marked tendency to dysentery has also been observed in several other

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diseases, particularly fever; and an obstinate diarrhœa has been in many cases, the immediate cause of death.

In the treatment of diarrhœa, it has been found, that along with attention to diet, ipecacuanha with opium and tonics, were the most appropriate remedies.

In the class of "other diseases," ulcers form nearly 2-3ds of the admissions; it has been remarked that the smallest scratch often becomes a troublesome sore in this jail, from the want of due ventilation both in the jail and hospital; and a fatal diarrhœa has ensued in several cases of ulcer, in patients who have been under treatment for some length of time in the hospital.

Amongst the deaths under the head "other diseases," are included no less than seven from sabre wounds, inflicted by the peons, when prisoners have attempted to escape; viz. two in 1830, and five in 1836.

The aggregate strength of the prisoners waiting for trial from 1829 to 1838, has been only 25, from whom there were 20 admissions into hospital, (including nine from bowel complaints) with 2 deaths, one from diarrhœa and one from dysentery.

Military Cantonment.

The Cantonment, in which the troops composing the garrison are quartered, stands at the distance of from two to three miles south-west of the fort, on the extensive plain already mentioned.

The lines for the men and the officers bungalows, cover a very large space of ground, being scattered over a superficial area of not less than 6 or 7 miles in circumference. Many of the bungalows occupied by the military officers and civilians, are large, of elegant construction, and have extensive well wooded gardens attached to them; and a lofty and spacious building in a large, but very barren and rocky compound, situated near the southern extremity of the cantonment, is occupied by the general officer commanding the division.

Force at the station. The troops generally consist of one regiment of native cavalry, one company of European foot artillery; one regiment of H. M's. foot, and four regiments of native infantry, forming a force of between 4 and 5,000 men. The native infantry corps furnish detachments in rotation to Tanjore, Combaconum and Negapatam; and occasionally to Coimbatore, amounting to from four to six companies, which are relieved twice a year.

Artillery barracks. The barrack for the artillery lies at the western extremity of the cantonment; it is a spacious, lofty, well ventilated and even elegant building, in an airy and well raised situation. Though not originally intended for troops, it is found in respect to healthiness and convenience, to answer the purposes of a barrack remarkably well, both in point of accommodation and situation. It is substantially built of brick and chunam, well lighted by venetian doors and windows, and the roof being lofty, it is particularly well ventilated; it has a terraced roof, and brick floors chunamed over. There is a mango tope inside the barrack walls, where the men can amuse themselves, and take exercise morning and evening; and a stream of excellent water runs within 200 yards, in which they bathe throughout the greater part of the year. There is sufficient accommodation for one hundred men, but the parcherry or huts, and other quarters allotted to the married men with families, of whom there is generally a large proportion, are defective in size, comfort and ventilation; and the proportion of sick, among the families, from these causes is sometimes very considerable. The hospital at present in use, is an upstair octagonal building attached to the barracks, it is rather small, and somewhat exposed especially during high winds and heavy rains; but it is well ventilated, having venetian doors, on all sides; there is free access to an excellent terraced roof where exercise can be taken, by convalescents; recoveries are thereby much accelerated, which counterbalances its other disadvantages. A European hospital however, ought not if possible to be under the same roof with a noisy barrack, besides which the sick have great facilities for obtaining liquor from their comrades, and others.

European infantry barrack, and hospital.

The European infantry barracks are situated near the church, about half a mile eastward to those of the artillery, facing the south, and having a spacious gravelly parade in front. The barracks which are substantially built of brick and chunam, are calculated for the accommodation of 800 men. They form a quadrangle, one half of which, 177 yards in length by 6 yards in breadth, and 12 feet high is tiled, the other portion, 140 yards in length, 5 yards in breadth and 12 feet high, being bomb-proof; they have a clean, neat, and commodious appearance, and are unenclosed, except for a very short space near the barrack guard on the south face, which is in several important respects a great defect; there is a well of good water in the centre of the square, which does not however afford a sufficient supply for the use of the troops, recourse is therefore had to the river water which is also of wholesome quality.

The hospital stands at the distance of about 350 yards from the barracks, on the south-west side of the regimental parade, and faces the east. It is a commodious, lofty and well ventilated building, enclosed on all sides by a wall 10 or 11 feet in height; and though found to be too small when the sick list is unusually heavy, it is otherwise very complete. Additional accommodation is now in progress of being built.

Cavalry lines.

The cavalry lines are placed nearly in the centre of the cantonment; and necesarily occasion much noise, and dust, in their neighbourhood. They are besides fully half a mile distant from the riding school, which is also in a bad situation, and nearly two miles from the exercising ground. They however possess the great advantage of being near a stream of running water, besides which they are now very abundantly supplied with excellent water from a well close by. The water is drawn into chunam troughs.

The hutting ground for the men covers a large space to the eastward of the horse lines.

The cantonment is divided into two pretty equal parts, by a small stream said to be artificially derived from the Cauvery,

some miles above Trichinopoly, and is the same which runs past the artillery barrack, and near to the cavalry lines. This stream, in its long and tortuous course, irrigates many thousand acres of paddy fields, and flows by a circuitous and sweeping channel, from one end of the cantonment to the other, being of incalculable advantage to the inhabitants in its neighbourhood. It is from twenty to thirty yards in breadth, of various depths at different seasons of the year, but generally fordable, and sometimes in the hot season nearly dry, it is always crowded with multitudes of washermen, and water carriers. Two strong built bridges are thrown across the nullah, in the line of the greatest thoroughfares, named the "Pootoor," and "Dawks," bridges, at each of which a small European guard is stationed.

Native Infantry lines. The lines, places of arms, officer's quarters, and sepoys' hutting ground, of the four regiments of native infantry, which are formed as it were into two brigades, two regiments being quartered in each, are situated nearly at the opposite or north-west and south-east extremities of the cantonment, and are separated from each other by the stream before mentioned. They stand upwards of a mile and a half apart.

Immediately to the west of the Pootoor bridge, lies the Pootoor parade, a large rectangular plain, having a rocky and gravelly, but tolerably level surface. It forms the parade and exercising ground for the two regiments quartered in its immediate vicinity, and the whole of the troops in the cantonment are often assembled here for general parade, and guard mounting. It is bounded on three sides by the places of arms, regimental hospitals, officers' bungalows, and also by the public road and hutting ground for sepoys, and on the fourth by the bank of the nullah.

The officer's bungalows in this part of the cantonment, are in general neat and commodious, though some are rather small. Several have large and well wooded compounds, and a few have tolerably good gardens. They extend for nearly a mile to the N. W., as far as the large village of Warriore, but are

irregularly scattered, widely separated from each other, and several are at an inconvenient distance from the lines. The sepoys hutting ground lies to the east of the parade. The huts are disposed in tolerably straight, wide and regular streets, with channels in front; they seem too close and crowded, nor are they in general so healthy as the other lines in the cantonment. The hospitals are small, ill ventilated, too narrow, low roofed, and can accommodate only 30 patients. The lines of the two other regiments of native infantry, form the south-eastern boundary of the cantonment, having originally been intended as barracks for European artillery; the public buildings, the depôts or places of arms, and the hospitals, are here of much superior construction to those before mentioned. They face to the south, are built on a fine open level plain, with a rocky bottom, and sandy or gravelly surface, which forms an excellent parade. The barracks are roofed with tiles, blue washed, and enclosed by a wall eight feet in height, they are well shaded in front by some fine old banyans, which are highly ornamental to this side of the cantonment. The same may be said of the hospitals, which are under the same roof. They are neatly constructed, situated about 300 yards to the rear of the barracks, and raised about 3 feet above the ground; they are floored with stone, have neat compounds around them, and are also enclosed by walls. The lines or hutting ground of the sepoys, are to the eastward of the hospitals, immediately in the rear of the places of arms, and at a convenient distance. The huts here are of a superior description, though some are rather low and confined; they are divided into wide and regular streets, admitting of a free circulation of air, are consequently well ventilated, and being kept generally very clean, are particularly healthy. The proportion of sick is said to be usually less here than in the Pootoor lines.

There is a very large tank to the south, partially filled with water, which forms the boundary of the parade and exercising ground. The roads are planted with trees on each side, and there are several topes of trees in the distance, which add much to the beauty of the country. A want of officers' bunga-

lows is felt at the Tanjore side of the cantonment, which though exposed to dust and high winds at some periods of the year, is in other respects well situated and healthy.

General parade ground. The general parade is an extensive open plain, on the extreme south of the cantonment, stretching from the church nearly two miles. The sub-soil is rocky or gravelly, with a sandy, level surface, but in many places it is intersected by the channels of numerous streams. It affords ample space for exercising and manœuvering the whole of the troops in garrison, who, for two or three months in the cool season, are usually out once or twice a week; the butts for artillery practice are constructed on its west side, and it is bounded on three sides by the race course and public roads, which as in other parts of the cantonment, are planted with rows of trees, some being of a very large size; these roads form the fashionable morning and evening ride. The race course is of ample extent, but rather sandy in some places; and the stand is now in ruins, there having been no public races for many years.

Public rooms. Public rooms, raised and supported by voluntary contribution, are placed in a centrical situation a little to the west of the cavalry lines. They contain a subscription library, well supplied with books, and periodical publications; and a reading room.

Places of worship. St. John's Church, a handsome building, is situated close to the general parade, on the north-west face, it is rather distant from the Pootoor side of the cantonment, and is nearly three miles from the fort; it affords ample accommodation for the European inhabitants and troops; divine service being performed regularly twice on Sunday. The churchyard is a spacious enclosure thickly studded with the tombs of Europeans. This church is rendered interesting as the place at which Bishop Heber preached his last sermon, his philanthropic labours having been suddenly terminated at Trichinopoly on the 3d April 1826; and his remains are entombed near the altar, a mural tablet with a short and simple epitaph, marking the spot.

There is a small roman catholic chapel, and a burying ground in the western outskirts of the cantonment, at which a Portuguese priest officiates, as at other European stations throughout the presidency.

There is likewise a large missionary chapel in the fort.

The native inhabitants are principally Hindoos or Gentoos, probably not more than one fifth being Musselmauns. In the native infantry regiments however, the latter are usually two-thirds, or three-fourths of the whole.

Pagodas. The hindoo pagodas on the island of Seringham, which is 9 miles long, and from 1 to 2 in breadth, have long been famous over India for their number, size, wealth, and antiquity, and there are likewise great numbers of other pagan buildings of smaller note, some literally covered with carving, and ornamental work. Many sacred spots, are to be met with throughout the cantonment. The natives generally speaking, are followers of Vishna.

Burying and burning grounds. The burying and burning grounds, are usually ill-placed, being close to the public roads, and in crowded parts of the cantonment, and suburbs. This appears a great error in a sanatory point of view, and might be easily remedied, there being much waste ground available at a moderate distance.

SOUTHERN DIVISION.

Table No. 22.—Return of sick of the European Troops, exhibiting the half yearly Admissions and Deaths from the principal diseases, and those which have been either Epidemic or Endemic, during the period of ten years, from 1829 *to* 1838 *inclusive.*

Years.			Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small Pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & Injuries.	OtherComplaints.	Average strength each year.	Annual per centage of sick to strength.	Annual per centage of deaths to sick treated.	Annual per centage of deaths to strength.
1829	Admitted.	1st half.	1,022	2	0	0	16	0	0	127	110	0	0	110	25	7	0	46	0	0	65	16	0	9	4	0	65	420	895	199 ·888	1 ·732	3 ·463
		2d ,,	767	0	0	0	10	0	0	8	104	0	0	160	24	5	0	17	0	0	210	8	0	28	0	0	41	212				
	Died......	1st half.	22	1	0	0	11	0	0	0	6	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	1				
		2d ,,	9	0	0	0	0	0	0	0	2	0	0	1	0	1	0	3	0	0	0	0	0	0	0	0	0	2				
1830	Admitted.	1st half.	565	0	0	0	26	0	0	16	72	0	0	72	8	0	0	18	0	0	135	6	0	7	1	0	34	170	944	135 ·169	2 ·037	2 ·754
		2d ,,	711	1	0	0	9	0	0	23	118	0	0	107	38	12	0	62	2	0	107	23	0	11	14	0	54	130				
	Died......	1st half.	8	0	0	0	4	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1				
		2d ,,	18	1	0	0	1	0	0	0	8	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	2				
1831	Admitted.	1st half.	684	2	0	0	5	0	0	14	74	0	2	61	18	62	0	51	1	0	23	33	0	17	24	0	78	219	875	142 ·400	2 ·327	3 ·314
		2d ,,	562	1	0	0	3	0	0	11	78	0	0	36	15	64	0	50	0	0	62	18	0	8	23	0	52	141				
	Died......	1st half.	17	2	0	0	1	0	0	0	6	0	0	1	0	0	0	2	0	0	0	1	0	0	1	0	0	3				
		2d ,,	12	0	0	0	1	0	0	0	5	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0	0	0				
1832	Admitted.	1st half.	644	1	0	0	152	0	0	6	81	0	2	85	3	10	0	39	0	0	5	22	0	5	16	0	57	160	855	144 ·327	5 ·429	7 ·836
		2d ,,	590	0	0	0	0	0	0	2	72	0	1	70	1	8	0	58	0	0	94	19	0	8	19	0	84	154				
	Died......	1st half.	57	1	0	0	39	0	0	0	6	0	0	3	0	2	0	3	0	0	0	0	0	0	0	0	0	3				
		2d ,,	10	0	0	0	0	0	0	0	3	0	0	1	0	0	0	2	0	0	0	0	0	0	2	0	0	2				
1833	Admitted.	1st half.	628	4	0	0	8	0	0	2	62	0	13	48	2	2	0	42	0	0	17	24	0	31	19	0	75	279	850	168 ·352	2 ·865	4 ·823
		2d ,,	803	0	0	0	3	0	0	4	76	0	6	50	1	0	0	46	1	0	32	11	0	96	16	0	73	388				
	Died......	1st half.	25	3	0	0	6	0	0	0	6	0	0	2	0	0	0	3	0	0	1	1	0	0	2	0	0	1				
		2d ,,	16	0	0	0	1	0	0	0	6	0	0	2	0	0	0	3	0	0	0	0	0	0	2	0	0	2				
1834	Admitted.	1st half.	739	0	0	0	2	2	13	4	65	0	3	73	2	0	0	46	0	0	13	10	0	296	18	0	84	108	825	181 ·333	1 ·604	2 ·909
		2d ,,	757	2	0	0	0	6	13	1	60	0	7	99	1	0	0	41	2	0	24	21	0	334	24	0	43	79				
	Died......	1st half.	12	0	0	0	2	0	0	0	4	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	2				
		2d ,,	12	2	0	0	0	0	1	0	3	0	0	2	0	0	0	2	0	0	0	1	0	0	0	0	0	1				
1835	Admitted.	1st half.	861	1	1	0	0	25	14	1	111	0	2	127	6	0	0	48	1	0	34	27	0	185	36	0	102	140	885	209 ·039	2 ·108	4 ·406
		2d ,,	989	3	0	0	0	8	32	6	58	0	4	158	42	3	0	81	0	0	63	55	0	231	36	1	62	146				
	Died......	1st half.	22	1	0	0	0	0	0	0	10	0	0	6	0	0	0	2	0	0	0	0	0	0	1	0	0	2				
		2d ,,	17	1	0	0	0	0	0	0	5	0	0	4	0	0	0	2	0	0	0	0	0	2	1	0	0	2				
1836	Admitted.	1st half.	667	2	0	0	0	4	16	5	31	0	3	111	19	0	0	60	0	0	13	52	0	160	31	0	38	122	921	166 ·666	1 ·433	2 ·388
		2d ,,	868	0	0	0	1	5	20	6	51	0	2	197	54	0	0	38	0	0	64	74	0	137	51	0	51	117				
	Died......	1st half.	11	0	0	0	0	0	1	0	2	0	0	1	0	0	0	4	0	0	0	1	0	1	1	0	0	0				
		2d ,,	11	0	0	0	0	0	0	0	4	0	0	1	1	0	0	0	0	0	0	0	0	1	2	0	1	1				
1837	Admitted.	1st half.	733	0	0	0	0	8	12	9	44	0	8	141	59	5	3	42	0	0	31	69	0	82	33	0	47	140	964	167 ·427	2 ·726	4 ·564
		2d ,,	881	2	0	0	11	7	14	15	125	0	17	211	36	0	2	48	0	0	33	50	0	94	39	0	38	139				
	Died......	1st half.	11	0	0	0	0	0	0	0	5	0	0	1	2	1	0	1	0	0	0	0	0	0	1	0	0	0				
		2d ,,	33	2	0	0	5	0	0	0	15	0	0	4	1	0	0	2	0	0	0	1	0	1	0	0	0	2				
1838	Admitted.	1st half.	816	1	0	0	8	12	13	18	45	0	16	120	10	1	0	38	0	0	8	74	0	146	60	0	52	174	908	184 ·251	1 ·673	3 ·083
		2d ,,	857	0	2	0	2	2	19	5	60	0	16	112	6	1	0	42	0	0	51	79	0	150	60	0	64	186				
	Died......	1st half.	13	1	0	0	4	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	0	1	0	0	3				
		2d ,,	15	0	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	0	1	3	0	0	1				

SOUTHERN DIVISION.

Table No 23.—Europeans.—Abstract of the preceding Returns, shewing the Total number of Admissions, and Deaths, &c. from 1829 *to* 1838.

	Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other Complaints.
Aggregate Strength. 8,922.																										
1829 to 1838. Admitted. 1st half.	7,359	13	1	0	217	51	68	202	695	0	49	948	152	87	3	430	2	0	344	333	0	938	262	0	632	1 932
1829 to 1838. Admitted. 2d half.	7,785	9	2	0	39	28	98	81	802	0	53	1,140	218	93	2	483	5	0	740	358	0	1,097	282	1	562	1,692
Total..	15,144	22	3	0	256	79	166	283	1,497	0	102	2,088	370	180	5	913	7	0	1,084	691	0	2,035	544	1	1,194	3,624
1829 to 1838. Died... .. 1st half.	198	9	0	0	67	0	1	0	45	0	0	18	2	5	0	19	0	0	1	6	0	1	8	0	0	16
1829 to 1838. Died... .. 2d half.	158	6	0	0	8	0	1	0	60	0	0	15	2	5	0	21	0	0	0	2	0	5	12	0	1	15
Total..	351	15	0	0	75	0	2	0	105	0	0	33	4	10	0	40	0	0	1	8	0	6	20	0	1	31
Average annual per centage of sick to strength.	169·737	0·246	0·033	0	2·869	0·885	1·860	3·171	16·778	0	1·143	23·402	4·147	2·017	0·056	10·233	0.078	0	12·149	7·744	0	22·808	6·097	0·011	13·382	40·618
Do. of deaths to sick treated.	2·317	68·181	0	0	29·296	0·000	1·204	0·000	7·014	0	0·000	1·580	1·081	5·555	0·000	4·381	0·000	0	0·092	1·157	0	0·294	3·676	0·000	0·083	0·855
Do. of deaths to strength.	3·934	0·168	0	0	0·840	0·000	0·022	0·000	1·176	0	0·000	0·369	0·044	0·112	0·000	0·448	0·000	0	0·011	0·089	0	0·067	0·224	0·000	0·011	0·347

SOUTHERN DIVISION.

Table No. 24.—Return of sick of the Native Troops, exhibiting the half yearly Admissions and Deaths from the principal diseases, and those which have been either Epidemic or Endemic, during the period of ten years, from 1829 to 1838 inclusive.

Years.			Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small Pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & Injuries.	Other Complaints.	Average strength each year.	Annual per centage of sick to strength.	Annual per centage of deaths to sick treated.	Annual per centage of deaths to strength.
1829	Admitted.	1st half.	1,898	4	0	0	265	0	0	101	38	0	0	37	517	5	0	4	1	0	14	125	0	55	12	0	121	599	6,819	53 ·145	5 ·491	2 ·918
		2d ,,	1,726	0	0	0	29	0	0	54	41	0	0	55	408	3	0	3	1	0	45	207	0	65	20	0	145	650				
	Died......	1st half.	156	1	0	0	123	0	0	5	5	0	0	2	5	1	0	1	0	0	0	1	0	0	1	0	0	11				
		2d ,,	43	0	0	0	17	0	0	2	1	0	0	0	7	2	0	1	0	0	0	4	0	0	4	0	0	5				
1830	Admitted.	1st half.	2,088	0	0	0	70	0	0	85	38	0	0	43	464	4	0	5	3	0	51	171	0	53	15	0	203	883	7,199	53 ·229	2 ·792	1 ·486
		2d ,,	1,744	5	0	0	1	0	0	55	20	0	3	53	401	0	0	2	0	0	37	208	0	44	22	0	204	659				
	Died......	1st half.	81	0	0	0	38	0	0	4	4	0	0	0	8	1	0	1	0	0	0	1	0	1	7	0	1	15				
		2d ,,	26	4	0	0	0	0	0	2	1	0	0	0	2	0	0	2	0	0	0	2	0	0	6	0	0	7				
1831	Admitted.	1st half.	1,560	1	0	0	12	0	0	80	21	0	37	67	249	6	0	3	4	0	27	113	0	56	12	0	148	724	7,006	41 ·378	2 ·552	1 ·056
		2d ,,	1,339	0	0	0	19	0	0	29	21	0	54	42	115	5	0	3	4	0	91	129	0	44	12	0	125	646				
	Died......	1st half.	42	0	0	0	8	0	0	3	1	0	0	3	3	0	0	0	0	0	0	2	0	1	4	0	3	14				
		2d ,,	32	0	0	0	10	0	0	4	1	0	0	0	1	1	0	0	0	0	0	2	0	0	4	0	1	8				
1832	Admitted.	1st half.	1,878	3	0	0	62	0	0	54	10	0	112	40	156	17	0	5	4	0	32	138	0	43	6	0	228	968	7,622	51 ·049	2 ·749	1 ·403
		2d ,,	2,013	0	0	0	29	0	0	73	27	0	144	28	204	8	0	2	8	0	65	164	0	40	7	0	246	968				
	Died......	1st half.	56	3	0	0	26	0	0	3	1	0	0	2	3	2	0	0	0	0	0	1	0	0	2	0	0	13				
		2d ,,	51	0	0	0	10	0	0	6	3	0	2	2	4	3	0	0	0	0	0	0	0	0	3	0	3	15				
1833	Admitted.	1st half.	2,978	1	0	0	169	0	0	74	44	0	591	85	527	1	0	3	5	0	63	127	0	46	7	0	196	1039	8,313	61 ·313	4 ·492	2 ·754
		2d ,,	2,119	0	0	0	62	0	0	80	65	0	269	68	232	0	0	6	4	0	55	138	0	62	11	0	172	895				
	Died......	1st half.	138	0	0	0	76	0	0	7	9	0	7	1	10	0	0	1	1	0	0	2	0	0	1	0	0	23				
		2d ,,	91	0	0	0	33	0	0	6	11	0	1	0	12	0	0	1	0	0	0	2	0	1	1	0	2	21				
1834	Admitted.	1st half.	1,658	0	9	4	33	122	1	26	27	0	212	70	160	17	5	5	3	0	22	117	4	110	42	1	164	504	7,577	48 ·330	3 ·113	1 ·501
		2d ,,	2,004	3	12	0	3	71	3	52	38	3	189	78	321	29	3	2	9	0	71	121	3	133	56	8	191	605				
	Died......	1st half.	67	0	1	0	22	0	0	4	1	0	3	3	10	0	0	1	0	0	0	5	1	1	7	0	1	7				
		2d ,,	47	2	5	0	1	0	0	3	8	0	1	0	6	0	0	0	0	0	0	1	0	0	9	1	0	10				
1835	Admitted.	1st half.	2,161	0	14	1	0	171	2	44	31	2	182	102	329	20	28	2	7	0	143	177	0	91	40	0	231	544	7,754	67 ·358	1 ·646	1 ·109
		2d ,,	3,062	1	21	1	2	335	3	62	37	1	330	87	904	19	2	8	5	0	90	183	0	111	53	1	199	607				
	Died......	1st half.	35	0	3	0	0	0	0	1	3	0	0	1	3	2	0	0	0	0	0	1	0	0	10	0	1	10				
		2d ,,	51	1	1	0	0	0	1	0	6	1	1	5	21	4	0	2	0	0	0	2	0	1	0	0	1	4				
1836	Admitted.	1st half.	2,680	2	18	2	0	368	10	64	17	0	260	53	694	24	28	5	2	0	85	141	1	100	60	2	160	584	6,785	78 ·644	1 ·405	1 ·105
		2d ,,	2,656	0	15	3	1	288	1	73	29	0	199	26	648	27	6	8	1	0	160	210	0	69	43	0	186	663				
	Died......	1st half.	42	2	2	0	0	0	0	2	3	0	1	7	3	3	0	2	0	0	0	2	0	0	8	0	0	7				
		2d ,,	33	0	2	0	1	0	0	7	1	0	1	1	4	1	0	0	0	0	1	1	0	0	4	0	0	9				
1837	Admitted.	1st half.	2,325	1	7	2	0	171	2	62	39	0	306	33	491	32	24	4	2	0	75	151	5	76	49	0	193	600	5,724	82 ·232	3 ·590	2 ·952
		2d ,,	2,382	1	4	0	154	182	3	145	89	0	268	50	358	17	24	3	5	0	82	180	0	64	42	1	192	518				
	Died......	1st half.	33	1	2	1	0	0	0	1	4	0	2	4	2	2	0	0	0	0	0	3	0	0	5	0	0	6				
		2d ,,	136	0	1	0	85	0	1	4	9	0	4	2	4	1	0	0	0	0	0	1	0	1	7	0	2	14				
1838	Admitted.	1st half.	2,284	1	1	0	29	205	2	91	29	0	337	51	422	34	33	0	7	0	205	103	5	68	32	1	184	354	6,343	70 ·707	1 ·694	1 ·198
		2d ,,	2,201	2	10	0	25	189	0	88	39	1	362	34	340	13	7	3	4	0	85	245	1	97	49	3	185	419				
	Died......	1st half.	33	0	0	0	12	0	0	1	4	0	1	1	2	2	0	0	1	0	0	0	0	0	0	0	1	8				
		2d ,,	43	2	1	0	11	0	0	4	1	0	1	1	7	0	0	0	0	0	0	6	0	0	6	0	0	3				

SOUTHERN DIVISION.

Table No. 25.—Natives.—Abstract of the preceding Returns, shewing the Total number of Admissions, and Deaths, &c. from 1829 *to* 1838.

	Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.
Aggregate Strength. 71,142.													
1829 to 1838. Admitted. 1st half.	21,510	13	49	9	640	1037	17	681	294	2	2·037	581	4,009
1829 to 1838. Admitted. 2d half.	21,246	12	62	4	325	1065	10	711	406	5	1·818	521	3,931
Total..	42,756	25	111	13	965	2102	27	1.392	700	7	3.855	1,102	7,940
1829 to 1838. Died... .. 1st half.	683	7	8	1	305	0	0	31	35	0	14	24	49
1829 to 1838. Died... .. 2d half.	553	9	10	0	168	0	2	38	42	1	11	11	68
Total..	1·236	16	18	1	473	0	2	69	77	1	25	35	117
Average annual per centage of sick to strength.	60·099	,0·035	0·156	0.018	1·356	2·954	0·037	1·956	0.983	0·009	5·418	1·549	11·160
Do. of deaths to sick treated.	2·890	64·000	16.216	7.692	49·015	0·000	7·407	4.956	11·000	14·285	0·648	3·176	1·473
Do. of deaths to strength.	1·737	0·022	0·025	0·001	0·664	0·000	0·002	0·096	0·108	0·001	0·035	0·049	0·164

	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other Complaints.
Aggregate Strength. 71,142.													
1829 to 1838. Admitted. 1st half.	160	118	36	38	0	717	1,453	15	698	275	4	1,828	6,799
1829 to 1838. Admitted. 2d half.	121	42	40	41	0	781	1,785	4	729	315	13	1,845	6,660
Total..	281	160	76	79	0	1,498	3,238	19	1,427	590	17	3,673	13,459
1829 to 1838. Died... .. 1st half.	13	0	6	2	0	0	18	1	3	45	0	7	114
1829 to 1838. Died... .. 2d half.	12	0	6	0	0	1	21	0	3	44	1	9	96
Total..	25	0	12	2	0	1	39	1	6	89	1	16	210
Average annual per centage of sick to strength.	0·394	0·224	0·106	0·111	0	2·105	4·551	0·026	2·005	0·829	0·023	5·162	18·918
Do. of deaths to sick treated.	8·896	0·000	15·789	2·531	0	0·066	1·204	5·263	0·420	15·084	5·882	0·435	1·560
Do. of deaths to strength.	0.035	0·000	0·016	0·002	0	0·001	0·054	0·001	0·008	0·125	0·001	0·022	0·295

SOUTHERN DIVISION.

No. 26.—Table exhibiting the Number of Admissions and Deaths from each Class of Disease, for 5 years.

EUROPEAN TROOPS.

CLASSES.	DISEASES.	1834 to 1838. Aggregate strength 4,502. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions and Deaths from each class of Disease. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers	Febris ephemera	32	0	46	0								
	,, intermitt quotid.	55	1	43	0								
	,, tertian.	41	1	96	2	706	15	966	13	1672	28	37 ·139	1 ·674
	,, remitteus.	6	2	4	0								
	,, continua	572	11	777	11								
	Cholera	10	6	14	5	10	6	14	5	24	11	0 ·533	45 ·833
Diseases of the abdominal viscera	Dysenteria acuta	291	19	351	35	296	21	354	36	650	57	14 ·438	8 ·769
	,, chronica	5	2	3	1								
	Diarrhœa	37	0	33	0								
	Colica	25	0	28	0								
	Obstipatio	21	0	24	0								
	Hœmorrhois	26	0	31	0								
	Enteritis	9	0	7	0	164	3	159	0	323	3	7 ·174	0 ·926
	Peritonitis	0	0	0	0								
	Gastritis	18	2	7	0								
	Dyspepsia	28	1	29	0								
	Hepatitis acuta	208	7	231	7								
	,, chronica	24	1	18	0	232	8	249	7	481	15	10 ·684	3 ·118
Diseases of the Lungs and Heart.	Catarrhus	82	1	81	3								
	Asthma	9	2	3	0								
	Phthisis pulmonalis	1	0	1	1								
	Hœmoptysis	0	0	3	1								
	Pleuritis	0	0	0	0	197	5	210	6	407	11	9 ·040	2 ·702
	Pneumonia	93	2	101	1								
	Carditis	0	0	1	0								
	Palpitatio	6	0	8	0								
	Dyspnœa	6	0	12	0								
Diseases of the Brain.	Apoplexia	4	2	7	5								
	Epilepsia	14	1	10	0								
	Paralysis	17	1	10	1								
	Cephalalgia	28	0	32	1								
	Phrenitis	0	0	0	0								
	Ictus solis	0	0	0	0								
	Amentia	1	0	2	0	132	5	160	9	292	14	6 ·486	4 ·794
	Mania	0	0	0	0								
	Hydrophobia	0	0	1	1								
	Delirium Tremens	13	1	29	0								
	Ebrietas	55	0	69	1								
Diseases of the Eye	Morbi oculorum	99	0	235	0	99	0	235	0	334	0	7 ·418	0 ·000
do. ,, Skin.	,, cutis	51	0	30	0	51	0	30	0	81	0	1 ·799	0 ·000
Eruptive Fevers	Variola	0	0	0	0								
	Varicella	1	0	0	0								
	Rubeola	0	0	0	0	6	0	4	1	10	1	0 ·222	10 ·000
	Scarlatina	0	0	0	0								
	Erysipelas	5	0	4	1								
Dropsies	Anasarca	8	1	5	0								
	Ascites	1	0	0	0	9	1	5	0	14	1	0 ·310	7 ·142
	Hydrothorax	0	0	0	0								
Rheumatic affections.	Rheumatismus acutus	207	2	255	2								
	,, chronicus.	22	1	24	0	229	3	279	2	508	5	11 ·283	0 ·984
	Neuralgia	0	0	0	0								
	Odontalgia	0	0	0	0								
Venereal affections	Syphilis primitiva	371	0	491	4								
	,, consecutiva.	16	1	10	1								
	Gonorrhœa	436	0	401	0								
	Hernia humoralis	31	0	26	0	858	1	931	5	1789	6	39 ·737	0 ·335
	Strictura urethræ	4	0	3	0								
Specific diseases	Atrophia	1	0	3	0								
	Beriberi	0	0	0	0								
	Elephantiasis	0	0	0	0								
	Lepra	0	0	0	0								
	Dracunculus	3	0	2	0	8	1	11	0	17	1	0 ·377	5 ·882
	Ulcus phagedenicum	0	0	1	0								
	Scrophula	1	0	4	0								
	Scorbutus	1	1	1	0								
Punishment.	Punitio	7	0	8	0	7	0	8	0	15	0	0 ·333	9 ·000
Wounds and injuries	Fractura	7	0	7	0								
	Luxatio	1	9	6	0								
	Subluxatio	23	0	10	0								
	Vulnus sclopitorum	3	0	1	0	316	0	255	1	571	1	12 ·683	0 ·175
	,, incisum	46	0	43	0								
	Contusio	231	0	178	1								
	Ambustio	5	0	10	0								
Other diseases, including Ulcus, Phlogosis, &c.		498	0	482	3	498	0	482	3	*980	†3	21 ·768	0 ·306
	Total	3816	69	4352	88	3816	69	4352	88	8168	157	181 ·450	1 ·922

Average per centage of deaths to strength, during these five years, has been 3·487.

* Of this number were Phlogosis 413 1
Do. do. Ulcers 222 1
Do. do. Bubo simplex. 160 0

Total..... 795 2

† The deaths under this head, include besides the 2 accounted for in the preceding note, 1 from icterus.

SOUTHERN DIVISION.

No. 27.—Table exhibiting the Number of Admissions and Deaths, from each Class of Disease, for 5 years.

NATIVE TROOPS.

Classes.	Diseases.	1834 to 1838. Aggregate strength 33.667. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions and Deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers......	Febris ephemera	1287	7	1348	8	3,819	52	4,299	65	8,118	117	24 ·112	1 ·411
	,, intermitt quotidian.	1906	18	2275	36								
	,, tertian....	190	2	296	6								
	,, remittens	127	9	105	6								
	,, continua..	309	16	275	9								
	Cholera.........	62	34	185	98	62	34	185	98	247	132	0 ·733	53 ·441
Diseases of the abdominal viscera......	Dysenteria acuta	118	12	184	15	143	15	232	25	375	40	1 ·113	10 ·666
	,, chronica..	25	3	48	10								
	Diarrhœa.......	287	9	420	18	725	23	865	25	1,590	48	4 ·722	3 ·018
	Colica..........	93	0	102	0								
	Obstipatio......	55	0	78	0								
	Hœmorrhois....	42	2	38	0								
	Enteritis........	4	4	2	0								
	Peritonitis......	1	0	0	0								
	Gastritis........	3	2	5	0								
	Dyspepsia......	240	0	220	7								
	Hepatitis acuta.	16	3	15	1	16	3	24	2	40	5	0 ·118	12 ·500
	,, chronica..	0	0	9	1								
Diseases of the Lungs and Heart.	Catarrhus.......	128	10	109	8	223	32	241	26	464	58	1 ·378	12 ·500
	Asthma.........	32	2	70	4								
	Phthisis pulmonalis..........	15	15	14	8								
	Hœmoptysis....	4	0	6	3								
	Pleuritis........	0	0	0	0								
	Pneumonia......	26	4	26	3								
	Carditis........	0	0	0	0								
	Palpitatio......	0	0	0	0								
	Dyspnœa......	18	1	16	0								
Diseases of the Brain.	Apoplexia.......	4	3	7	5	119	11	132	17	251	28	0 ·745	11 ·155
	Epilepsia.......	5	2	7	3								
	Paralysis.......	21	5	21	2								
	Cephalalgia.....	47	0	60	2								
	Phrenitis.......	4	0	1	1								
	Ictus solis......	0	0	0	0								
	Amentia........	10	0	6	0								
	Mania..........	11	1	18	0								
	Hydrophobia....	0	0	2	2								
	Delirium Tremens.........	17	0	10	2								
	Ebrictas........	0	0	0	0								
Diseases of the Eye..	Morbi oculorum..........	365	0	488	1	365	0	488	1	853	1	2 ·533	0 ·117
do. ,, Skin.	,, cutis....	1037	0	1,142	0	1,037	0	1,142	0	2,179	0	6 ·472	0 ·000
Eruptive Fevers......	Variola.........	15	1	4	0	149	1	63	0	212	1	0 ·629	0 ·471
	Varicella.......	100	0	40	0								
	Rubeola........	20	0	9	0								
	Scarlatina......	0	0	1	0								
	Erysipelas......	14	0	9	0								
Dropsics....	Anasarca.......	23	0	33	5	28	3	42	9	70	12	0 ·207	17 ·14[illegible]
	Ascites.........	5	3	5	4								
	Hydrothorax....	0	0	4	0								
Rheumatic affections.	Rheumatismus acutus........	510	3	534	6	793	10	956	11	1,749	21	5 ·195	1 ·200
	,, chronicus..	269	7	405	5								
	Neuralgia......	0	0	0	0								
	Odontalgia......	14	0	17	0								
Venereal affections..	Syphilis primitiva..........	249	1	259	0	445	1	474	2	919	3	2 ·729	0 ·326
	,, consecutiva	30	0	24	0								
	Gonorrhœa.....	109	0	107	2								
	Hernia humoralis..........	51	0	82	0								
	Strictura urethræ..........	6	0	2	0								
Specific diseases......	Atrophia.......	49	8	62	10	213	9	146	12	361	21	1 ·072	5 ·817
	Beriberi........	9	1	4	0								
	Elephantiasis...	2	0	5	1								
	Lepra..........	0	0	0	0								
	Dracunculus....	118	0	42	0								
	Ulcus phagedenicum........	4	0	13	1								
	Scrophula......	28	0	21	0								
	Scorbutus......	3	0	1	0								
Punishment.	Punitio........	18	0	4	0	18	0	4	0	22	0	0 ·065	0 ·000
Wounds and injuries...	Fractura........	19	0	19	2	932	3	955	3	1,887	6	5 ·604	0 ·317
	Luxatio.........	8	0	6	0								
	Subluxatio......	60	0	40	0								
	Vulnus sclopitorum........	13	1	5	0								
	,, incisum....	126	1	134	0								
	Contusio........	654	1	701	0								
	Ambustio......	52	0	50	1								
Other diseases, including Ulcus, Phlogosis, &c..............		2021	13	2,055	14	2,021	13	2,055	14	*,4076	†27	12 ·106	0 ·662
	Total......	11,108	210	12,305	310	11,108	210	12,305	310	23,413	520	69 ·542	2 ·220

Average per centage of deaths to strength, during these five years, has been 1·544.

* Of this number were

Phlogosis...........	2042	4
Do. do. Ulcers......	1367	4
Do. do. Bubo simplex	271	0
Total.....	3680	8

† The deaths under this head, include besides those in the preceding note, 4 from splenitis, 4 from cynanche, 2 from fistula in pereneo, 2 from icterus, 1 from aneurisma, 1 from hernia, 1 from arthritis, 1 from tetanus, and 1 from epistaxis; the remaining 2 were sudden deaths not particularised.

SOUTHERN DIVISION.

No. 28.—*Table exhibiting the Admissions and Deaths, from the most particular diseases amongst the European and Native Troops in the Southern Division, during the ten years from 1829 to 1838 inclusive, with the proportion each bears to the total number of Admissions and Deaths.*

		Cholera.		Fever.		Dysentery.		Hepatitis.		Diarrhœa.		Thoracic diseases.		Rheumatism.		Syphilis.		Total from these diseases.	
		Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.
Europeans.																			
Total Admissions....	15,144	256	$\frac{1}{59}$	2,740	$\frac{2}{11}$	1,497	$\frac{1}{10}$	913	$\frac{2}{33}$	283	$\frac{2}{107}$	544	$\frac{2}{55}$	691	$\frac{1}{22}$	2,035	$\frac{1}{7}$	8,959	$\frac{16}{27}$
,, Deaths........	351	75	$\frac{1}{5}$	47	$\frac{1}{7}$	105	$\frac{1}{2}$	40	$\frac{1}{9}$	0	0	20	$\frac{1}{17}$	8	$\frac{1}{44}$	6	$\frac{1}{58}$	301	$\frac{6}{7}$
Natives.																			
Total Admissions....	42,756	965	$\frac{1}{44}$	13,178	$\frac{1}{3}$	700	$\frac{1}{61}$	76	$\frac{1}{562}$	1,392	$\frac{2}{61}$	590	$\frac{1}{72}$	3,238	$\frac{1}{13}$	1,427	$\frac{1}{30}$	21,566	$\frac{1}{2}$
,, Deaths........	1,236	473	$\frac{2}{5}$	202	$\frac{1}{6}$	77	$\frac{1}{16}$	12	$\frac{1}{103}$	69	$\frac{1}{18}$	89	$\frac{1}{14}$	39	$\frac{1}{32}$	6	$\frac{1}{206}$	967	$\frac{4}{5}$

No. 29.—*The following Table shews the per centage of Admissions from the same diseases to the strength, of deaths to the sick treated, and of deaths to the strength; it exhibits also the difference in these respects amongst the European and Native sick.*

	Cholera.		Fever.		Dysentery.		Hepatitis.		Diarrhœa.		Thoracic diseases.		Rheumatism.		Syphilis.		Total from these diseases.		Grand Total.	
	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.
European Troops. STRENGTH, 8922.																				
Per centage of Admissions to strength..................	256	2·869	2740	30·710	1497	16·778	913	10·233	283	3·171	544	6·097	691	7·744	2035	22·808	8959	100·414	15,144	169·737
,, of Deaths to sick treated..	75	29·296	47	1·715	105	7·014	40	4·381	0	0·000	20	3·676	8	1·157	6	0·294	301	3·359	351	2·317
,, of Deaths to strength.....	75	0·840	47	0·526	105	1·176	40	0·448	0	0·000	20	0·224	8	0·069	6	0·067	301	3·373	351	3·934
Native Troops. STRENGTH, 71,142																				
Per centage of Admissions to strength..................	965	1·356	13178	18·381	700	0·983	76	0·106	1392	1·956	590	0·829	3238	4·551	1427	2.005	21.566	30·314	42,756	60·099
,, of Deaths to sick treated..	473	49·015	202	1·532	77	11·000	12	15·789	69	4·956	89	15·084	39	1·204	6	0·420	967	4·483	1,236	2·890
,, of Deaths to strength.....	473	0·664	202	0·283	77	0·108	12	0·016	69	0·096	89	0·125	39	0·054	6	0·008	967	1·359	1,236	1·737

SOUTHERN DIVISION.

No. 30.—*Table shewing the amount of diseases and deaths from the principal classes of disease, for the period of five years, from* 1834 *to* 1838 *inclusive, with the proportion of admissions from each to the total of sick treated, and of deaths to the total mortality.*

		Fevers.		Cholera.		Dysentery.		Abdominal complaints.		Diseases of the Liver.		Diseases of the Lungs.		Diseases of the Brain.		Dropsies.		Rheumatic affections.		Venereal complaints.	
		Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop,	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.
European Troops.																					
Total Admissions....	8,168	1672	1/5	24	1/340	650	2/25	323	1/25	481	1/17	407	1/20	292	1/28	14	1/583	508	1/16	1789	2/9
„ Deaths	157	28	2/11	11	1/14	57	4/11	3	1/52	16	1/10	11	1/14	14	1/11	1	1/157	5	1/31	6	1/36
Native Troops.																					
Total Admissions....	23,413	8118	1/3	247	1/95	375	2/125	1590	4/59	40	1/585	464	1/50	251	1/93	70	1/334	1749	1/13	919	2/51
„ Deaths....	520	117	2/9	132	1/4	40	1/13	48	4/43	5	1/104	58	1/9	28	2/37	12	1/43	21	1/25	3	1/173

No. 31.—*Table exhibiting the per centage of admissions from the same classes of disease to the strength, of deaths to sick treated, and of deaths to strength, both amongst European and Native Troops.*

	Fevers.		Cholera.		Dysentery.		Abdominal complaints.		Diseases of the Liver.		Diseases of the Lungs.		Diseases of the Brain.		Dropsies.		Rheumatic affections.		Venereal complaints.	
	Ad. & deaths.	Per-cent-a ge.	Ad. & deaths.	Per-cent. age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths	Per-cent-age.	Ad. & deaths.	Per-cent-age	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per. cent-age.
European Troops. STRENGTH, 4,502																				
Per centage of sick to strength.	1672	37·139	24	0·533	650	14·438	323	7·174	481	10·684	407	9·040	292	6·486	14	0·310	508	11·283	1789	39·733
„ of deaths to sick......	28	1·674	11	45·833	57	8·769	3	0·928	15	3·118	11	2·702	14	4·794	1	7·142	5	0·984	6	0·573
„ of deaths to strength...	28	0·621	11	0·244	57	1·266	3	0·066	15	0·333	11	0·244	14	0·310	1	0·022	5	0·111	6	0·133
Native Troops. STRENGTH, 33,667.																				
Per centage of sick to strength.	8118	24·112	247	0·733	375	1·113	1590	4·722	40	0·118	464	1·378	251	0·745	70	0·207	1749	5·195	919	2·729
„ of deaths to sick......	117	1·441	132	53·441	40	10·666	48	3·018	5	12·500	58	12·500	28	11·155	12	17·142	21	1·200	3	0·326
„ of deaths to strength....	117	0·347	132	0·392	40	0·118	48	0.142	5	0·014	58	0·172	28	0·083	12	0·035	21	0 062	3	0·008

REMARKS ON THE GENERAL TABLES.

Remarks on the general tables of diseases.

The general table No. 22, for European troops, includes the sick of H. M.'s. Regiment and one Company of Artillery at Trichinopoly, and also of a small detachment from the latter which is located at Palamcottah; it exhibits the admissions into hospital, and the mortality from the most important diseases each half year, for a period of ten years from 1829 to 1838 inclusive; it also points out the annual per centage of sick to strength, of deaths to sick treated and of deaths to strength; the average of these, as shewn in the abstract table No. 23, and 3·934 being 169·737, 2·317 respectively.

The average of admissions into hospital will be observed to hold pretty uniform, nor has the mortality varied very much, except in 1832 when it was nearly doubled, both as regards the number of deaths to sick treated, and also to the numerical strength, and which increase it will also be observed was occasioned solely by cholera; the disease attacked H. M.'s. 54th Regiment in the month of March of that year, shortly after their arrival at Trichinopoly, and no less than 149 cases, with 37 deaths, occurred.

In 1833, 35 and 37, the mortality was increased somewhat above the average, in respect to the per centage of deaths to strength, but not from epidemic disease, and in 1835 the admissions are considerably above the average, caused principally by fever and dysentery.

On referring to the general abstract table No. 23, it will be observed, that the total admissions have been 15,144, and the total deaths 351, from an aggregate strength of 8,922 men.

The most prevalent diseases have been *fevers, dysentery, hepatitis, venereal complaints, ophthalmy, rheumatism* and *thoracic diseases*; and the most fatal have been *dysentery,*

cholera, fever, hepatitis and thoracic diseases ; the exact per centage of each of which to the strength is noted in the table. The solitary death under the head ophthalmy occurring in 1832, it may be mentioned, was the result of an attack of delirium tremens.

The admissions from fever and dysentery have been most numerous in the second half-yearly period, and the latter disease has been greatly more fatal during this season of the year, while cholera has occasioned a marked increase in the total mortality, during the first half-yearly period, a circumstance coinciding with the remark of Superintending Surgeon Currie, long resident in this division, viz., "that cholera when it prevails at Trichinopoly in an epidemic form, occurs almost invariably about the beginning of the year, after the fall of rain of the north-east monsoon, but while the wind continues to blow steadily from that quarter."

The tables No. 24 and 25, shew the amount of the same diseases and mortality, which have occurred amongst the Native troops at head quarters, and at the various outstations in this division, during the same period of ten years.

The total number treated has been 42,756, and 1236 deaths have taken place, in an aggregate strength of 71,142 men. The average per centage of sick to strength has been 60·099, of deaths to sick treated 2·890, and of deaths to strength 1·737.

Fevers rheumatism, cutaneous diseases, ophthalmy, and *syphilis* have occasioned the most numerous admissions, and the mortality has chiefly resulted from *cholera, fever, diarrhœa* and *dysentery,* and *thoracic* diseases.

The average of sickness has been pretty uniform during the decennial period, and the amount in each of the half-yearly periods is nearly similar; but the mortality is considerably greater here as amongst the European troops in the first half-year, and it will be observed to be occasioned also exclusively by cholera. In 1829, 33 and 37, this disease

prevailed more or less in an epidemic form, and increased the per centage of deaths, not only to the sick treated, but also to the strength a good deal above the average already stated. In February and March 1829, 231 cases, with 94 deaths occurred in the 15th Regiment N. I., while marching through the division, and in 1833 in the month of February 64 cases, with 24 deaths, happened in the 44th N. I. at Trichinopoly.

With regard to fever, the great proportion of cases of the intermittent type will not excite surprise when it is considered that in many of the stations, the exciting causes of this disease are known to abound. During the months of June, July and August, whilst westerly winds prevail, fever (ephemeral and intermittent) is common at Trichinopoly, but it has been observed invariably to become more so, on the setting in of the north-east monsoon; at which time exposure to the cold winds during the night with insufficient clothing conduce to the increase of fever, though from the absence of any noxious exhalations from the ground, it is of a simple form and by no means fatal.

The tabular statements No. 28 and 29, have been framed similarly to those given in the preceding divisions, from the abstract returns No. 23 and 25, and exhibit much information relative to the corresponding diseases amongst both European and Native troops.

The other tables No. 26 and 27, exhibit the admissions and deaths from each disease in the various classes therein mentioned, during a period of five years from 1834 to 1838, as in the two preceding reports; the total sick from each class is also shewn, with the mortality, and the per centage of admissions to strength, and of deaths to sick treated. Amongst the European troops, the greatest number of admissions have been from the classes of *fever, bowel complaints* including *dysentery,* and *hepatitis, venereal complaints, rheumatic affections, diseases of the lungs and of the brain, wounds and accidents and ophthalmy;* and the most fatal have been *abdo-*

minal complaints, fevers, cholera, diseases of the brain and of the lungs, rheumatism and *venereal affections.*

The per centage of sick to strength during the five years, has been 181·450, of deaths to sick treated 1·922, and of deaths to strength 3·487.

In table No. 27, for Native troops, the greatest number of admissions have been from the classes of *fevers, bowel complaints, rheumatic affections, diseases of the skin, wounds and injuries,* and *venereal affections;*—and the greatest mortality has resulted from *cholera, fevers, abdominal complaints and diseases of the lungs, and of the brain.*

The admissions into hospital during the five years have averaged 69·542 per cent on the strength, the deaths to sick treated 2·220, and the deaths to strength 1·544.

The tabular statements No. 30 and 31 have been framed from these two returns No. 26 and 27, in the same manner as in the reports of the Presidency and Centre divisions, and exhibit at one view, the proportion and per centage of admissions and deaths, from the principal classes of disease.

As the general table No. 22. for Europeans, includes also the sick of the Artillery at Trichinopoly, the following have been framed to exhibit the admissions and deaths separately, and for the purpose of comparison, as regards the most important diseases. The sick of the detachment of Artillery at Palamcottah is included, but this is not considered to vitiate the general results. The table for H. M.'s. troops comprises eight complete years, when the same regiment occupied the station during a period of 12 months; that for the Artillery embraces ten years, as the number being very limited, it was thought proper to extend it to have larger numbers, and so to obtain more accurate inferences.

	Table No. 32. H. M.'s. Regiment, *Aggregate Strength* 6234. 1829, 31, 33——37 and 1839.				Table No. 33. H. C. Artillery *Agg. Str.* 955. From 1832 to 1841 inclusive.			
	Admitted.	Died.	Per centage of sick to strength.	Per centage of deaths to sick.	Admitted.	Died.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers	2269	34	36 ·397	1 ·498	342	4	35 ·811	1 ·169
Cholera	50	27	0 ·802	54 ·000	3	2	0 ·314	66 ·666
Diarrhœa	214	0	3 ·432	0 ·000	84	1	8 ·795	1 ·190
Dysenteria acuta	1276	95	20 ·468	7 ·445	106	7	11 ·099	6 ·603
,, Chronica	31	7	0 ·497	22 ·580	9	0	0 ·942	0 ·000
Hepatitis acuta	574	23	9 ·207	4 ·006	152	3	15 ·916	1 ·973
,, Chronica	49	6	0 ·786	12 ·244	27	0	2 ·827	0 ·000
Catarrhus	165	4	2 ·646	2 ·424	69	1	7 ·225	1 ·449
Phthisis pulmonalis	10	5	0 ·160	50 ·000	4	1	0 ·418	25 ·000
Hœmoptysis	3	0	0 ·048	0 ·000	2	0	0 ·209	0 ·000
Pneumonia	235	2	3 ·769	0 ·851	12	0	1 ·256	0 ·000
Apoplexia	29	16	0 ·465	55 ·172	0	0	0 ·000	0 ·000
Paralysis	31	3	0 ·497	9 ·677	1	0	0 ·104	0 ·000
Delirium Tremens	45	2	0 ·721	4 ·444	16	0	1 ·675	0 ·000
Rheumatismus acutus	388	1	6 ·223	0 ·257	97	0	10 ·157	0 ·000
,, Chronicus	43	0	0 ·689	0 ·000	37	1	3 ·874	2 ·702
Other diseases	6051	12	97 ·064	0 ·198	1297	8	135 ·811	0 ·616
Total	11463	237	183 ·878	2 ·067	2258	28	236 ·439	1 ·240

Per centage of deaths to strength 3·801. H. M.'s. troops.

Per centage of deaths to strength 2·931. H. C. troops.

SOUTHERN DIVISION.

No. 34—*Table exhibiting the sickness and mortality amongst the OFFICERS of H. M.'s. Regiments at Trichinopoly, during a period of eight years.**

Aggregate Strength 271							
CLASSES	DISEASES.	Admitted.	Died.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers.	Febris intermit quot..........	7	0	120	1	44 ·280	0 ·833
	,, remittens....	7	0				
	,, com. continua..	106	1				
	Cholera....	1	1	1	1	0 ·369	100 ·000
Diseases of the abdominal viscera..	Diarrhœa..... ..	10	0	73	1	26 ·937	1 ·369
	Dysenteria......	12	1				
	Obstipatio......	9	0				
	Hœmorrhois.. ..	2	0				
	Dyspepsia......	7	0				
	Icterus.........	2	0				
	Hepatitis.......	31	0				
Diseases of the Lungs.	Catarrhus......	15	0	18	0	6 ·642	0 ·000
	Asthma....... ..	1	0				
	Pneumonia.....	2	0				
Diseases of the Brain.	Apoplexia.......	1	0	11	3	4 ·059	27 ·272
	Epilepsia.......	1	0				
	Paralysis.......	4	1				
	Concussio.... ..	1	0				
	Amentia........	1	0				
	Delirium Tremens...... ..	3	2				
Rheumatic affections.	Rheumat acutus et chronicus..	22	0	22	0	8 ·118	0 ·000
Venereal affections..	Syphilis primitiva..........	5	0	18	0	6 ·642	0 ·000
	Gonorrhœa.....	10	0				
	Hernia humoralis......... ..	3	0				
Diseases of the eye...	Morbi oculorum	8	0	8	0	2 ·952	0 ·000
do. Skin..	cutis............	2	0	2	0	0 ·738	0 ·000
	Other diseases..	141	0	141	0	52 ·029	0 ·000
	Total..	414	6	414	6	152 ·767	1 ·449

NOTE—Per centage of deaths to strength 2·214

* Viz. 1829, 31, 33, 34, 35, 36, 37 and 1839.

SOUTHERN DIVISION.

No. 35—*Table exhibiting the sickness and mortality amongst the WOMEN of H. M.'s. Regiments at Trichinopoly, during the same period of eight years.*

Aggregate Strength. 734 CLASSES	DISEASES.	Admitted.	Died.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers......	Febris remittens	19	2	347	6	47 ·275	1 ·729
	,, intermit quot.	3	0				
	,, com. continua..........	325	4				
	Cholera........	8	2	8	2	1 ·089	25 ·000
Diseases of the abdominal viscera......	Diarrhœa.......	15	0	189	7	25 ·749	3 ·703
	Dysenteria.....	94	5				
	Colica..........	28	0				
	Dyspepsia......	7	0				
	Obstipatio......	11	0				
	Splenitis........	5	0				
	Enteritis........	1	0				
	Gastritis........	7	1				
	Hepatitis........	21	1				
Diseases of the Lungs.	Catarrhus......	4	0	13	1	1 ·771	7 ·692
	Pneumonia......	9	1				
Diseases of the Brain.	Apoplexia......	3	3	5	3	0 ·681	60 ·000
	Hysteria........	2	0				
Rheumatic affections.	Rheumatismus..	5	0	5	0	0 ·681	0 ·000
Diseases of the eye...	Morbi oculorum	185	0	185	0	25 ·204	0 ·000
do. Skin..	,, cutis........	3	0	3	0	0 ·408	0 ·000
	Other diseases..	101	*1	101	1	13 ·760	0 ·990
	Total..	856	20	856	20	116 ·618	2 ·336

NOTE—Per centage of deaths to strength 3·724.
* A severe contusion.

SOUTHERN DIVISION.

No. 36.—*Table exhibiting the sickness and mortality amongst the CHILDREN of H. M.'s. Regiments at Trichinopoly, during the same period.*

Aggregate Strength. 981 — CLASSES.	DISEASES.	Admitted.	Died.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers......	Febris intermitt quotid........	3	0	392	26	39 ·959	6 ·632
	,, remittens....	43	1				
	,, com. continua..........	346	25				
	Cholera........	12	5	12	5	1 ·223	41 ·750
Diseases of the abdominal viscera......	Diarrhœa..	59	9	159	23	16 ·207	14 ·465
	Dysenteria.	99	13				
	Marasmus..	1	1				
Diseases of the Lungs	Catarrhus......	16	0	19	2	1 ·936	10 ·526
	Phthisis pulmonalis..........	1	1				
	Pneumonia.....	2	1				
	Convulsio......	7	6	7	6	0 ·713	85 ·714
Eruptive fevers......	Varicella.... ...	1	0	8	0	0 ·815	0 ·000
	Rubeola........	7	0				
Dropsies....	Anasarca.......	1	1	1	1	0 ·101	100 ·000
	Ulcus grave....	2	2	2	2	0 ·203	100 ·000
	Dentitio........	4	3	4	3	0 ·407	75 ·000
Diseases of the Eye.........	Morbi oculorum........	907	0	907	0	92 ·456	0 ·000
do. Skin	,, cutis,......	90	0	90	0	9 ·174	0 ·000
	Other diseases..	80	0	80	0	8 ·154	0 ·000
	Total......	1681	68	1681	68	171 ·355	4 ·045

NOTE—Per centage of deaths to strength 6·981.

SOUTHERN DIVISION.

Table shewing the Number of Persons successfully vaccinated, from 1829 to 1838 inclusive.

DISTRICT OR STATIONS.	Class and sex of Patients.						Total Vaccinated.	
	Christians.		Hindoos.		Mahomedans.			
	Males.	Femaels.	Males.	Females.	Males.	Females.	Males.	Females.
Salem..	802	761	9,039	8,314	559	387	10,400	9,462
Coimbatore........ ..	407	399	12.474	11,693	408	293	13,289	12,385
Travancore....	3,115	3,323	7,480	6,145	1,371	836	11,966	10,304
Cochin..	3,404	2,695	5,958	5,066	587	419	9,949	8,180
Tinnevelly....	3,169	2,712	6,867	5,474	454	28[illegible]	10,490	8,468
Madura......	1,949	1,727	15,895	13,867	569	373	18,413	15,967
Dindigul..	1,848	1,555	8,385	6,542	321	174	10,554	8,271
Ramnad	1,061	1,028	9,725	8,810	438	425	11,224	10,263
Tanjore....	450	384	13,166	10,295	199	148	13,815	10,827
Combaconum..	741	621	16,174	15,167	1,004	673	17,919	16,461
Negapatam......	466	403	16,962	14,681	750	6[illegible]0	18,178	15,744
Trichinopoly........	2,661	2,079	9,479	7,381	935	682	13,075	10,142
Grand Total..	20,073	17,687	1,31,604	1,13,435	7,595	5,523	1,59,272	1,36,474

Number of Vaccinators in each District.

	1st Class Vaccinators.	2d Class Vaccinators.
Salem.	1	2
Coimbatore.	1	3
Travancore.	1	3
Cochin.	1	3
Tinnevelly.	1	3
Madura.	1	3
Dindigul.	1	3
Ramnad.	1	3
Tanjore.	1	3
Combaconum.	1	3
Negapatam.	1	3
Trichinopoly.	1	3
Total....	12	36

The number vaccinated in this Division during these ten years is 2,95,746; the whole expense incurred, amounts to Rupees 1,08,864 which gives an average of somewhat more than 36¾ Rupees per hundred, or 8¾ pence per head in English money.

SOUTHERN DIVISION.

Statement shewing the extent of accommodation, Dietary, Allowances for Clothing, Hours of labour &c. in the several jails throughout the Provinces of the Southern Division.

JAIL OF	SALEM.	COIMBATORE.	TINNEVELLY.	MADURA.	COMBACONUM.	NEGAPATAM.	TRICHINOPOLY.
Number of Prisoners the Prison is capable of containing in separate sleeping cells.	25	8 Prisoners* in the eight Solitary Cells.	The Jail at present consists of a large choultry considerable additions and improvements have been sanctioned by Government with a view to converting the choultry into an efficient jail.	There are 3 solitary cells, and 6 large wards	6	Number of Prisoners 106. Number of Cells 7,	In the inner jail where the convicted & condemned Prisoners are confined about 220 Prisoners can safely be confined viz. 12 large cells 14 to 15 men each 8 solitary cells adjoin these, 2 men each, & 4 cells on the south side about 30 men.
Number of Prisoners the prison is capable of containing, where more than one prisoner sleeps in one cell.	522	275 Prisoners at 15 prisoners per cell if free accommodation is allowed, or 360 at 20 per cell if closely confined there being 18 large cells.	The above remarks apply to this head also.	400	401	These cells being large 106 of the Prisoners sleep very comfortably in 4 of them: the remaining 3 are vacant.	In the inner jail 220 men, in the outer jail, where the debtors and security prisoners are confined, and where also are 3 wards for an hospital, capable of holding about 25 sick, and ward for females about 100 more, in all 320 prisoners.
Dietary or other weekly allowance, and weekly cost per head.	One Seer of rice, and 4 pice for curry stuff &c. are allowed daily per head, the cost of which per week is annas 5, and pice 10; no weekly allowance to the Prisoners for Mutton &c.	5 Annas 10 Pice each head per week; for those who eat cholum, at 100 Rs. weight of cholum valued 6 pice, and 4 pice worth of curry stuff &c. per diem, 6 annas and 10½ pice per head for those, who eat coarse rice, at 80 Rs. weight of rice, valued at 7½ pice, and 4 pice worth of curry stuff per diem, 7 annas per head for sick who eat fine rice, at 75 Rs. weight of rice, valued at 8 pice, and 4 pice worth of curry stuff &c. per diem.	80 Rs. weight of rice, and 4 small pice for vegetables, for each man per diem; the cost for the week is about 7 annas and 9 pice.	80 Rs. weight of rice with 4 pice worth of curry stuff per diem for sentenced prisoners at an average of annas 6 pice 2 and Cts 30 per head, those under trial are on diminished allowance.	Weekly allowance—Daily ⅝ of a measure of rice or 80 Rs. weight, and 4 pice for wood Masauls and vegetables, cost weekly 5 annas 1 pice.	6 annas and 7 pice per week for each.	Prisoners allowed to buy a seer of meat every Sunday, out of their allowance. 80 Rupees weight of rice is allowed per diem and 60 for the sick; one-third of an anna cost per week 4 annas 9 pice.
Allowance of clothing and bedding, and cost per head.	A cloth worth annas 5, is allowed per head once every 6 months, and a cumbly worth annas 6 is allowed once a year, no allowance for bedding.	Two cloths each of 7 annas worth, and 1 Cumbly valued at 12 annas each head, per annum.	Each prisoner is allowed 1 Cumbly (1¼ Rupee) 2 Cloths (1 Rupee) total cost 2 Rupees and 4 Annas.	Each is allowed 9 Annas and 5 Pice every 6 months for clothing.	1 Cloth for six months 8 Annas. 3 Mats for do. 6 do. Total..14 do.	2 Cloths, one Cumbly, and a Mat per Annum, value one Rupee and seven Annas,	One Cumbly and mat per Annum, a coarse cloth every half year, price one Rupee and three Annas.
Description of employment and hard labour.	Cleaning and repairing the public roads, as well as working in the neighbourhood of the Jail, and Court building.	Repairing high roads, public streets, tanks, &c., making *baskets and bringing materials for the same. * This latter employment is resorted to, only in a few instances.	Repairing roads, cutting wood working at the forge, and on public buildings &c.	Paper making, and common employment inside the jail, labour on the roads, and pulling down the ramparts.	Repairing public roads, making paper, and weaving cloths.	They work on the roads, besides being occasionally employed in other public works.	Employed in the construction, and repairs of roads and bridges in the District, and Cantonment of Trichinopoly.
Hours of labour and of exercise.	The Pirsoners are sent out daily (Sunday excepted) at 7 o'clock in the morning, to work until 5 in the evening, they are allowed to rest for one hour, between 12 and 1 in the afternoon.	From 7 A. M. to 4 P. M.	The convicts leave jail at 7 A.M. and return at 4 P. M. In the interval they rest from 12 to 1 o'clock.	From 7 A. M. to 5 P.M. every day, Sundays excepted.	From 7 to 12 A. M. From 1 to ½ past 4 P. M.	From 7 A. M. to 5 P. M. Between these hours, they are allowed one hour to take rest viz. from 12 to 1 o'Clock.	Leave the jail soon after 6 A. M. and employed at work until 12, and again from 1 to 4 P. M. are locked up at 9 P. M.

APPENDIX.

Meteorological Observations, made at Trichinopoly, in 1841 *and* 1842.

	Barometer.			Thermometer.				Amount of rain.	Number of days on which rain has fallen.	Prevailing Winds.	
	Mean Maxim.	Mean Minim.	General Mean.	Mean Maxim.	Mean Minim.	General Mean.	Mean daily range.	Inches.	Days.	A. M.	P. M.
January 1841	29 ·75	29 ·71	29 ·73	81	73 ·3	77 ·1	7 ·7	$\frac{1}{2}$	2	N. E.	N. E.
February „	29 ·75	29 ·70	29 ·75	82	74 ·6	78 ·3	7 ·4	0	1	N. E. & E. by S.	N. E. & E. by S.
March „	29 ·73	29 ·58	29 ·65	89	81	85	8	1-20th	2	S. E.	S. E. by N. W.
April „	29 ·64	29 ·59	29 ·62	91 ·3	85 ·3	88 ·3	6	1-5th	3	S. E.	S. E.
May „	29 ·56	29 ·52	29 ·54	92	81	86 ·5	11	3-23rd	10	Westerly & N. W.	Westerly by S. E.
June „	29 ·56	29 ·52	29 ·54	93 ·6	85 ·6	88 ·6	8	1-10th	5	Westerly	Westerly
July „	29 ·67	29 ·43	29 ·53	87	80 ·6	83 ·8	6 ·4	$\frac{3}{4}$	1	N. W.	N. W.
August „	29 ·75	29 ·68	29 ·72	89 ·6	83 ·6	86 ·6	6	$8\frac{1}{4}$	8	S. W.	S. W.
September „	*0	0	0	90 ·5	82 ·5	86 ·5	8	4	13	S. W.	S. W.
October „	0	0	0	91	79 ·3	85 ·1	11 ·7	11	14	N. E.	N. E.
November „	0	0	0	85 ·6	79	82 ·3	6 ·6	4-5th	6	N. E.	N. E.
December „	0	0	0	87 ·6	80	83 ·8	7 ·6	0	0	N. E.	N. E.
January 1842	0	0	0	85	73	79 ·1	8	5 16-20th	5	N. E.	N. E.
February „	0	0	0	90 ·6	74 ·6	87 ·6	16	0	0	N. E.	S. W.
March „	0	0	0	0	0	0		0	0		
April „	0	0	0	0	0	0		0	0		
May „	0	0	0	94 ·3	87 ·3	90 ·8	7	0	2	S. S. E.	S. S. W.
June „	0	0	0	93 ·6	88 ·3	90 ·8	5 ·3	$1\frac{1}{2}$	8	S. S. E.	S. S. W.
July „	0	0	0	88	86	87	2	1	5	S. S. E.	S. S. W.
August „	0	0	0	92	84 ·6	88 ·4	7 ·7	1	6	S. S. E.	S. S. W.
September „	0	0	0	92	80 ·6	86 ·3	11 ·4	$11\frac{1}{4}$	16	N. E.	S. S. E.
October „	0	0	0	92	80 ·3	86 ·1	11 ·7	$6\frac{3}{4}$	12	N. E.	S. S. E.
November „	0	0	0	84	77 ·6	80 ·8	6 ·4	$3\frac{3}{4}$	14	N. E.	S. S. E.
December „	0	0	0	85	78 ·3	81 ·6	6 ·7	$\frac{1}{2}$	3	N. E.	S. S. E.

* Observations not taken during the remaining months, on account of the Barometer being out of repair.

Statistical Table for the Collectorate of Salem for the year 1837.

Number and Names of the Talook's.	No. of Ploughs.	Numer of ryots holding Puttah. Total.		Total of the four descriptions of land viz. Dry, Wet, Pasture and Garden.			Total of Wet Land.		
		Number of Ryots.	Number of Puttahs.	Acres	Gs.	As.	Acres.	Gs.	As.
1 Ahtoor	2,203	12,042	11,255	30,428	13	15	3,001	18	7
2 Namcul	4,441	18,553	16,420	21,013	11	15	2,699	5	5
3 Paramutty	2,921	9,014	7,726	27,043	12	0	2,019	8	7
4 Salem	4,284	13,424	13,403	40,604	31	14	3,503	23	15
5 Shenkerrydroog	3,380	9,421	7.750	40,597	18	9	1,286	11	8
6 Raizepoor	2,717	10,266	8,066	32,284	12	5	3,298	16	9
7 Womaloor	3,850	11,678	9,875	64,308	30	9	2.411	2	4
8 Trichengrode	4,142	11,980	10,150	27,580	0	6	1,832	12	14
9 Darumpoory	5,170	19,078	16,594	83,747	31	4	6,997	17	3
10 Tengracottah	4,589	12,950	12,180	63,582	24	14	2,154	13	5
11 Kistnagherry	4,171	12,268	11,023	53,099	37	5	4,847	36	13
12 Trepatoor	4,619	8.515	8,097	36,310	22	12	3,519	34	1
13 Denkencottah	2,790	10,946	9,716	57,464	15	7	3,039	14	5
14 Ossoor	898	4,611	3,990	21,856	30	6	1,712	26	6
15 Mullapaddy	489	1.399	1,225	10,712	6	6	427	7	15
16 Giddagaviel of Senkerrydroog	0	0	0	6,062	25	0	11	33	10
17 ,, of Namcul	0	0	0	101	27	6	5	22	2
Total	50,664	1,66,145	1,47,470	6,16,805	32	5	4,2767	25	1

Table exhibiting the number of admissions and deaths, in the detachment of native troops stationed at Salem, from 1829 to 1838 inclusive.

CLASSES	DISEASES.	From 1829 to 1838, Aggregate strength 2440. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Admissions & deaths from each class of diseases, 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class	Total Deaths from each class.	Percentage of sick to strength.	Percentage of Deaths to sick.
Fevers.... ..	Febris ephemera	4	0	9	0	87	2	110	3	197	5	8 ·073	3 ·533
	„ intermit quot.	81	2	110	3								
	„ remittens.....	2	0	0	0								
	Cholera........	20	13	15	7	20	13	15	7	35	20	1 ·434	57 ·142
Diseases of the Abdominal viscera......	Diarrhœa..... ..	15	1	21	1	33	1	42	2	75	3	3 ·073	4 ·000
	Dysenteria acuta et chronica.	4	0	7	1								
	Dyspepsia......	10	0	10	0								
	Obstipatio......	3	0	3	0								
	Hœmorrhois....	1	0	1	0								
	Hepatitis......	1	0	1	1	1	0	1	1	2	1	0 ·081	50 ·000
Diseases of the Lungs.	Catarrhus......	0	0	3		6	3	17	2	23	5	0 ·942	21 ·739
	Asthma........	3	3	10	0								
	Phthisis pulmonalis..........	1	0	2	2								
	Pneumonia.....	2	0	2	0								
Diseases of the Brain.	Apoplexia......	2	2	3	3	4	3	9	3	13	6	0 ·532	46 ·153
	Paralysis.......	2	1	3	0								
	Mania..........	0	0	3	0								
Eruptive fevers.......	Variola.........	0	0	0	0	3	0	2	0	5	0	0 .205	0 ·000
	Varicella........	3	0	2	0								
Dropsy.. ..	Anasarca.......	2	1	9	2	2	1	9	2	11	3	0 ·450	27 ·272
Rheumatic affections.	Rheumat. acutus et chronicus.	38	0	45	3	38	0	45	3	83	3	3 ·401	3 ·614
Venereal affections....	Syphilis primitiva..........	1	0	10	0	6	0	20	0	26	0	1 ·064	• ·000
	„ consecutiva..	0	0	1	0								
	Gonorrhœa,l....	5	0	6	0								
	Hernia humoralis..........	0	0	3	0								
Specific diseases......	Atrophia........	2	1	0	0	33	16	7	0	40	18	1 ·631	45 ·000
	Dracunculus....	7	0	7	0								
	Beriberi........	*24	17	0	0								
	Scrophula.......	0	0	0	0								
Diseases of the eye...	Morbi Oculorum..........	9	0	17	0	9	0	17	0	26	0	1 ·064	0 ·000
Do. skin.	Morbi Cutis....	10	0	8	0	10	0	8	0	18	0	0 ·737	0 ·000
	Other diseases...	132	0	114	0	132	0	114	0	†246	0	10 ·082	0 ·000
	Total..	384	41	416	23	384	41	416	23	800	64	32 ·786	8 ·000

* All these cases were admitted prior to 1832.

† Of this number 128 were cases of ulcer.

Statistical Table for the Collectorate of Coimbatore for the year 1837.

	Names of the Talooks.	Number of Villages.	Number of Hamlets.	Total.	Total number of Ryots.	Number of Ploughs.	Number of Houses.	Population. Male.	Population. Female.	Population. Total.	Cattle. Cows.	Cattle. Bullocks.	Cattle. Female Buffaloes.	Cattle. Male Buffaloes.	Cattle. Sheep.	Cattle. Total.	Dry Land. Bullhas.		Garden Land. Bullahs.		Wet Land. Cawnies.	
1	Coimbatore	172	218	390	8, 670	4, 786	29, 279	46, 213	47, 570	93, 783	13, 950	15, 180	5, 140	1, 235	28, 185	63, 690	11, 719	1¾	2, 938	10¾	1, 574	15
2	Sattimungalum	141	434	575	10, 932	5, 328	23, 394	29, 944	29, 780	59, 724	32, 298	31, 338	14, 458	3, 430	26, 242	1,07,766	13, 830	5¼	1, 926	2¾	6, 736	13½
3	Denaickencottah	213	271	484	5, 551	3, 120	11, 499	15, 361	15, 528	30, 889	15, 350	11, 307	2, 509	925	25, 222	55, 313	5, 456	6¼	861	6¾	513	13¾
4	Colligal	146	305	451	10, 878	4, 865	10, 242	23, 367	22, 266	45, 633	20, 538	11, 266	6, 261	2, 125	22, 396	62, 586	11, 594	14¾	439	¼	2, 677	3¼
5	Pullachy	127	154	281	4, 885	3, 861	17, 575	26, 168	27, 303	53, 471	19, 168	18, 315	6, 739	1, 612	13, 631	59, 665	25, 017	6	1, 295	11½	2, 678	11¼
6	Perindoray	147	402	549	10, 116	6, 892	22, 917	28, 750	29, 200	57, 950	16, 182	15, 361	3, 276	515	32, 213	68, 547	15, 358	15½	3, 347	7¼	146	11½
7	Andioor	68	302	370	6, 146	2, 944	10, 731	14, 641	15, 097	29, 738	11, 196	6, 315	1, 308	217	11, 645	30, 681	11, 863	8¼	613	6½	65	3¾
8	Errode	63	194	257	7, 883	5, 843	10, 007	19, 493	19, 269	38, 762	7, 188	6, 413	2, 290	655	15, 018	31, 564	12, 761	12	1, 879	5¾	4, 935	1
9	Dharapooram	41	325	366	4, 619	3, 359	11, 880	25, 092	24, 748	49, 840	7, 995	7, 168	2, 480	669	19, 168	37, 480	2, 720	5¼	1, 066	15	3, 863	12½
10	Kongyen	42	298	340	5, 918	5, 692	18, 148	29, 339	28, 098	57, 437	16, 393	14, 463	2, 455	804	37, 470	71, 585	8, 727	7¼	1, 799	14¼	83	2½
11	Caroor	79	612	691	8, 191	5, 774	22, 060	36, 975	36, 421	73, 396	26, 092	16, 103	5, 091	2, 608	41, 588	91, 482	13, 383	10¼	1, 118	13½	5, 136	4¾
12	Cheyoor	105	300	405	6, 228	4, 548	14, 358	21, 641	21, 682	43, 323	10, 554	11, 937	3, 475	401	13, 845	40, 213	7, 269	5¼	2, 901	14¾	371	3¾
13	Pulladum	89	317	406	9, 492	6, 409	22, 799	41, 695	42, 895	84, 590	39, 766	33, 532	13, 315	2, 561	59, 315	1,48,489	16, 876	15½	4, 563	5½	557	13½
14	Chu kragherry	87	149	236	6, 131	5, 343	21, 388	30, 635	31, 120	61, 755	12, 133	15, 488	4, 676	1, 170	14, 735	48, 202	15, 039	1	2, 110	10	2, 578	15
	Poligars Peishcush Villages.	0	0	0	0	0	6, 357	9, 799	10, 181	19, 980	7, 335	6, 415	3, 208	384	2, 996	20, 338	0	0	0	0	0	0
	Total	1,520	4,281	5,801	1, 05,940	68, 764	2, 52,634	3, 99,113	4, 01,158	8, 00,271	2, 56,138	2, 20,601	76,681	19, 511	3,61,669	9,37,600	1, 71,612	3¾	26, 872	12¼	31, 920	½

COIMBATORE.

Table exhibiting the number of admissions and deaths, in the detachment of native troops stationed at Coimbatore, during a period of seven years, from 1832 to 1838 inclusive.

CLASSES	DISEASES.	From 1832 to 1838, inclusive. Aggregate strength 878. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2nd Half. Ad.	2nd Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick treated.
Fevers......	Febris intermit quot........	77	3	86	0	104	3	116	0	220	3	25 ·056	1 ·363
	,, com. continua.........	27	0	30	0								
	Cholera........	8	2	1	0	8	2	1	0	9	2	1 ·024	22 ·222
Diseases of the Abdominal viscera.	Diarrhœa.......	15	1	37	1	16	1	40	1	56	2	6 ·378	3 ·571
	Dysenteria acuta............	0	0	3	0								
	Dyspepsia......	1	0	0	0								
	Hepatitis acuta et chronica...	0	0	2	0	0	0	2	0	2	0	0 ·227	0 ·000
Diseases of the Lungs.	Asthma........	1	0	1	0	2	0	2	1	4	1	0 ·455	25 ·000
	Phthisis pulmonalis..........	0	0	0	0								
	Pneumonia	1	0	0	0								
	Dyspnœa.......	0	0	1	1								
Diseases of the Brain.	Apoplexia......	0	0	0	0	0	0	1	0	1	0	0 ·113	0 ·000
	Epilepsia.......	0	0	1	0								
	Paralysis.......	0	0	0	0								
	Mania..........	0	0	0	0								
Eruptive Fevers......	Variola.........	1	0	0	0	5	0	1	0	6	0	0 ·683	0 ·000
	Varicella.......	3	0	1	0								
	Erysipelas......	1	0	0	0								
Dropsies...	Anasarca.......	1	0	3	1	1	0	3	1	4	1	0 ·455	25 ·000
	Ascites.........	0	0	0	0								
Rheumatic affections.	Rheumat. acutus et chronicus..	9	0	20	0	9	0	20	0	29	0	3 ·302	0 ·000
Venereal affections...	Syphils primitiva..........	9	0	9	0	16	0	14	0	30	0	3 ·416	0 ·000
	,, consecutiva..	1	0	0	0								
	Gonorrhœa.....	4	0	3	0								
	Hernia humoralis............	2	0	2	0								
Specific diseases.	Dracunculus...	6	0	2	0	7	0	2	0	9	0	1 ·024	0 ·000
	Scrophula.....	1	0	0	0								
Diseases of the eye.	Morbi oculorum.........	12	0	15	0	12	0	15	0	27	0	3 ·075	0 ·000
Diseases of the skin.	Morbi cutis.....	35	0	28	0	35	0	28	0	63	0	7 ·175	0 ·000
	Other diseases..	57	0	49	0	57	0	49	0	106	0	12 ·072	0 ·000
	Total....	272	6	294	3	272	6	294	3	566	9	64 ·464	1 ·590

TRAVANCORE.

The following table exhibits the names, area, and population of each district, according to the census taken in 1836, amounting to 12,80,668.

Names of Districts.	Area in square miles.	Number of Villages.	Population according to the census of 1836. Men.	Women.	Boys.	Girls.	Total.
Agasteesurum	97¼	59	21,306	22,486	12,847	10,873	67,512
Tovanla	120¾	51	7,471	8,332	4,283	3,652	23,738
Kulkulum }	284¼	98	12,420	13,286	7,085	5,730	38,521
Irraneel }		103	25,211	27,839	18,612	15,371	87,033
Vellaveneode	145⅓	91	13,253	13,683	8,376	6,931	42,243
Neyattenkarray	213¼	104	18,089	17,859	9,182	7,418	52,610
Trevandrum South }	99¼	31	9,339	9,876	4,697	3,790	27,692
Trevandrum North }		33	10,302	10,510	4,677	3,831	29,320
Nedooveneaad	339½	52	6,951	6,836	3,312	2,736	19,835
Sherayenkeel	143	87	17,251	18,638	10,425	8,980	55,294
Quilon or Kolum	153½	156	19,289	20,491	11,639	10,173	61,592
Karunayapally	89	122	15,742	16,330	7,738	6,367	46,177
Kartegapally	70	71	16,272	17,445	9,704	7,902	51,323
Ambalapuley	121¼	72	16,434	17,032	8,657	6,849	48,972
Kotaurukarray }	634½	176	9,093	8,853	5,094	4,178	27,218
Patanapurum }		70	6,861	7,206	3,876	3,141	21,084
Kunnatore	184½	121	12,157	12,497	7.458	6,249	38,358
Manvaleckarray }	1106¾	145	21,440	21,402	11,368	9,442	63,652
Chenganore }		108	16,281	14,792	8,459	6,709	46,241
Tirroowalla	124¾	130	16,259	14,972	8,096	6,381	45,706
Cotayam	147	84	9,337	9,025	4,802	3,946	27,110
Changanaucherry	317½	65	11,764	11,477	6,856	5,695	35,792
Meenachel	312	72	7,818	8,021	5,468	4,661	25,968
Todupuley	534¾	67	3,553	3,602	2,086	1,931	11,172
Ehthumanore	140¼	46	11,219	11,246	5,837	5,152	33,454
Sharretalley	129⅓	37	16,668	18,597	10,597	9,339	55,201
Vyekum	88¾	60	10,596	10,936	5,599	3,159	21,597
Perrawam	116	96	7,166	7,673	3,599	3,159	21,597
Muanthupuley	339	140	10,969	11,419	6,718	6,050	35,156
Koonattunaad	163¾	109	9,449	9,427	5,037	4,452	28,365
Aulengaad	208½	103	8,810	9,106	5,240	4,957	28,113
Parravore	104¾	119	9,010	9,074	5,883	5,168	29,135
Shencottah including Malliankulam	64¾	27	6,976	7,708	4,560	3,656	22,900
Total	6,653⅓	2,908	4,14,744	4,27,673	2,38,080	2,00,171	12,80,668

Statistical Table for Tinnevelly, for the year 1837.

District.	Villages.	Hamlets.	Total.	Land Rent. Number of Ryots	Land Rent. Number of Puttahs.	Land Cultivated with Wet Grain.			Dry Grain.			Total.		
Tinnevelly														
Collectors Division														
Nelliambalum	142	84	226	4, 847	4, 847	21, 200	20	4¼	0	0	0	21, 200	20	4¼
Vedoogramum	53	55	108	2, 673	2, 673	12, 006	3	1¾	0	0	0	12, 006	3	1¾
Tencausey	68	103	171	3, 403	3, 403	18, 201	5	3½	0	0	0	18, 201	5	3½
Nadoomundalum	248	433	681	27, 749	27, 749	38, 011	8	3	0	0	0	38, 011	8	3
Shenkeminarcoil	33	173	206	5, 711	5, 711	19, 633	7	5½	0	0	0	19, 633	7	5¼
Streevygoontum	140	273	413	7, 357	7, 357	27, 449	2	3½	0	0	0	27, 449	2	3½
Alvartinvevelly	36	131	167	3, 248	3. 248	20, 106	15	6½	0	2	5	20, 106	18	3½
Punjamahl	114	305	419	5, 148	5, 148	6, 883	6	4	0	0	0	6, 883	6	4
Chokumputty	19	106	125	2, 557	2, 557	8, 131	14	2	0	0	0	8, 131	14	2
Sub-Collector's Division														
Shermadavy	139	48	187	4, 502	4, 502	16, 074	0	6⅝	2	12	1½	16, 076	12	7¼
Brummadasem	45	142	187	2, 936	2, 936	18, 907	6	1⅜	0	0	0	18, 907	6	1⅜
Calacaud	230	345	575	6, 384	6, 384	44, 202	11	4½	3	20	3⅛	44, 206	10	7⅝
Peshcush 27 Zemindaries			816											
Total	1,267	2,198	4,281	76, 515	76, 515	250, 807	18	6¼	6	14	1⅝	250, 814	11	7⅞

Statistical Table for the District of Madura, for the year 1837.

Villages.	Hamlets.	Total.	Population.			Number of Houses.	Cattle.						Means of irrigation by											Number of Fields.	Extent of land cultivated.		Ploughs.	Cultivating Inhabitants in aumanee Villages.
			Men.	Women.	Total.		Cows and Calves.	Bullocks.	Female Buffaloes.	Male Buffaloes.	Sheep.	Total.	Tanks.		River Channels.		Anicuts or Dams.		Wells.		Ponds.		Total.					
													In repair.	Out of repair.	In repair.	Out of repair.	In repair.	Out of repair.	In repair.	Out of repair.	In repair.	Out of repair.			Cawnies.	As		
4,925	2,195	7,120	1,46,856	1,43,995	2,90,851	72,110	69,029	56,005	27,555	6,978	2,70,241	4,29,808	650	104	381	14	39	11	2,450	360	2,315	0	6,324	2,61,348	1,65,599	8½	23703½	43,509

MADURA.

Table exhibiting the Number of Admissions and Deaths, in the detachment of Native Troops stationed at Madura, during a period of ten years, from 1829 *to* 1838 *inclusive.*

CLASSES.	DISEASES.	from 1829. to 1838. inclusive. Aggregate strength 1,542. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Admissions and Deaths from each class of Disease. 1st Half. Ad.	Dd.	2d Half. Ad.	Dd.	Total admissions from each class.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers......	Febris ephemera	55	0	56	1	87	1	76	2	183	3	11·867	1·639
	,, intermitt quotid....	28	0	19	0								
	,, com. continua.......	4	1	1	1								
	Cholera........	5	3	12	8	5	3	12	8	17	11	1·102	64·706
Diseases of the abdominal viscera......	Diarrhœa......	16	1	29	2	33	1	47	2	80	3	5·188	3·750
	Dysenteria acuta et chronica....	5	0	5	0								
	Obstipatio......	7	0	9	0								
	Dyspepsia......	3	0	3	0								
	Hœmorrhois....	2	0	1	0								
Diseases of the Lungs	Catarrhus......	2	0	2	0	4	0	5	0	9	0	0·583	0·000
	Asthma.......	1	0	3	0								
	Pneumonia.....	1	0	0	0								
Diseases of the Brain.	Epilepsia......	1	0	3	0	3	0	4	0	7	0	0·453	0·000
	Paralysis.......	1	0	1	0								
	Mania..........	1	0	0	0								
Eruptive fevers......	Varicella........	9	0	4	0	9	0	4	0	13	0	0·843	0·000
Dropsies....	Anasarca.......	0	0	2	0	0	0	2	0	2	0	0·129	0·000
Rheumatic affections.	Rheumatismus acutus et chronicus..........	24	1	27	2	24	1	27	2	61	3	3·696	5·882
Venereal affections...	Syphilis primitiva.........	9	0	12	0	19	0	24	0	43	0	2·788	0·000
	,, consecutiva.	1	0	2	0								
	Gonorrhœa.....	7	0	5	0								
	Hernia humoralis..........	1	0	5	0								
	Strictura urethræ.........	1	0	0	0								
Specific diseases.....	Atrophia........	1	0	0	0	4	0	1	0	5	0	0·324	0·000
	Dracunculus....	2	0	1	0								
	Scrophula......	1	0	0	0								
Diseases of the Eye..	Morbi oculorum........	7	0	20	0	7	0	20	0	27	0	1·750	0·000
do. ,, Skin.	,, cutis.......	13	0	9	0	13	0	9	0	22	0	1·426	0·000
	Other diseases..	97	0	103	0	97	0	103	0	200	0	12·970	0·000
	Total......	305	6	334	14	305	6	334	14	639	20	41·439	3·145

Statistical Table for the District of Dindigul, for the year 1837.

Villages.	Hamlets.	Total.	Population.			Number of Houses.	Cattle.						Means of irrigation by											Number of Fields.	Extent of land cultivated.		Ploughs.	Cultivating Inhabitants in aumanee villages.
													Tanks.		Anicuts or Dams.		River Channels.		Wells.		Ponds.							
			Men.	Women.	Total.		Cows and Calves.	Bullocks.	Female Buffaloes.	Male Buffaloes.	Sheep.	Total.	In repair.	Out of repair.	In repair.	Out of repair.	In repair.	Out of repair.	In repair.	Out of repair.	In repair.	Out of repair.	Total.		Cawnies.	As		
592	2,431	3,024	1,40,426	1,37,224	2,77,650	76,162	91,398	50,061	28,264	5,458	15,5,498	3,30,679	1037	238	375	55	185	53	7,637	3,051	2,255	0	14886	129,725	1,74,639	0	218251/2	70,195

COMBACONUM.

Table exhibiting the Number of Admissions and Deaths, in the detachment of Native Troops stationed at Combaconum, during the ten years from 1829 *to* 1838 *inclusive.*

Aggregate Strength. 629 CLASSES.	DISEASES.	Admitted.	Died.	Total admissions from each class.	Total deaths from each class.	Percentage of sick to strength.	Percentage of deaths to sick treated.
Fevers........	Febris ephemera....	12	0	158	2	25·119	1·265
	,, intermitt quot.	139	2				
	,, remittens......	6	0				
	,, com. continua.	1	0				
	Cholera............	5	3	5	3	0·794	60·000
Diseases of the abdominal viscera.	Diarrhœa..	21	1	37	1	5·882	2·702
	Dysenteria.	3	0				
	Obstipatio..........	8	0				
	Hœmorrhois........	5	0				
Diseases of the Lungs.	Catarrhus..........	5	0	6	1	0·953	16·666
	Asthma..........	1	1				
	Mania...............	2	0	2	0	0·317	0·000
	Varicella...........	1	0	1	0	0·158	0·000
	Anasarca...........	2	1	2	1	0·317	50·000
	Rheumatismus acut. et chronicus......	32	0	32	0	5·087	0·000
Venereal affections.	Syphilis primitiva...	8	0	15	0	2·383	0·000
	Gonorrhœa.........	5	0				
	Hernia humoralis...	2	0				
Specific diseases.	Dracunculus........	1	0	3	0	0·476	0·000
	Scrophula..........	2	0				
	Morbi oculorum....	18	0	18	0	2·861	0·000
	,, cutis........	34	0	34	0	5·405	0·000
	Other diseases......	82	0	82	0	13·036	0·000
	Total......	395	8	395	8	62·798	2·025

NOTE—Percentage of deaths to strength 1·271.

NEGAPATAM.

Table exhibiting the Number of Admissions and Deaths, in the detachment of Native Troops stationed at Negapatam, during ten years from 1832 *to* 1841 *inclusive.*

Aggregate strength 1819 CLASSES.	DISEASES.	Admitted.	Died.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers........	Febris ephemera....	56	0	68	2	3·738	2·941
	,, intermit quot..	11	1				
	,, com: continua.	1	1				
	Cholera...........	5	4	5	4	0·274	80.000
Diseases of the Abdominal viscera.	Diarrhœa..	5	1	33	3	1·814	9·090
	Dysenteria.	7	2				
	Obstipatio.	17	0				
	Dyspepsia..........	3	0				
	Hœmorrhois........	1	0				
Do. of the Lungs.	Catarrhus..........	11	0	19	4	1·044	21·052
	Asthma............	2	0				
	Phthisis pulmonalis	3	3				
	Pneumonia.........	3	1				
Do. of the Brain.	Paralysis...........	4	1	5	1	0·274	20·000
	Mania..............	1	0				
	Anasarca...........	1	0	1	0	0·054	0·000
Rheumatic affections.	Rheumatism: acutus et chronicus..	26	0	26	0	1·429	0·000
Venereal affections.	Syphilis primitiva..	12	0	15	0	0·824	0·000
	Gonorrhœa.........	2	0				
	Hernia humoralis...	1	0				
	Atrophia....	1	1	1	1	0·054	100·000
	Morbi oculorum....	7	0	7	0	0·384	0·000
	,, cutis..........	27	0	27	0	1·484	0·000
	Other Diseases......	72	0	72	0	3·958	0·000
	Total....	279	15	279	15	15·338	5·376

NOTE.—Percentage of deaths to strength 0·824.

Statistical Table for the Province of Tanjore, for the year 1837.

DISTRICT.	Villages.	Total Number of Ryots.	Total Number of Puttahs.
PRINCIPAL COLLECTORS DIVISION.			
Trivady........................	279	12,802	12,802
Paupanapum....................	245		
Trivalore........................	399		
Keenaloore......................	101	413	413
Tirooterapoondy.................	356		
Puttoocottah.....................	1,046	2,475	2,475
Mannargoody....................	350		
Nunnellum.......................	328	1,117	1,117
Codavassel.......................	225		
SUB-COLLECTORS DIVISION.			
Myaverum........................	349	1,462	1,462
Coollaullum.....................	304	1,618	1,608
Combaconum.....................	360		
Sheally...........................	360	2,646	1,814
Paraullum.......................	345	921	921
Velungamaun....................	278		
EUROPEAN POSSESSION.			
Nagore...........................	280	1,451	1,451
Negapatam......................	36	298	298
Devicottah.......................	37	504	345
Total....	5,678		

Statistical Table for the Collectorate of Trichinopoly, for the year 1837.

	Number of Mankanum.	Villages.	Hamlets.	Total.	Gross Extent of Lands.								
					Wet.			Dry.			Total.		
					C.	G	A.	C.	G	A.	C.	G	A.
Conaud.................	4	182	118	300	43,540	86	8½	85,284	17	3½	128,825	3	12
Vitticutty..............	8	91	265	356	14,967	40	1½	153,640	48	13½	168,607	88	15¾
Iyalore or Moosery.....	3	54	107	161	12,211	32	9	58,018	49	5¾	70,229	81	14
Laulgoody..............	15	235	55	290	31,189	82	4	67,108	68	12	98,298	51	0
Total....	40	562	545	1107	101,909	11	7	364,051	8	2¾	465,961	25	9¾
Torriore................	12	184	167	551	9,640	5	7½	227,409	57	½	237,049	62	8
Woodiarpolliam........	31	338	84	422	4,211	21	14	163,774	45	5	167,985	67	3
Arrealoor...............	18	286	2	288	1,104	80	7½	131,516	96	1½	135,621	76	9
Volicondapoorum......	6	128	58	186	4,466	11	11¼	219,944	16	6½	224,110	28	2
Total....	67	936	311	1247	22,122	19	8¼	742,645	14	13½	765,067	34	6
Grand Total....	107	1498	856	2354	124,331	60	15½	1106696	99	¼	1231028	59	15¾